Introductory Lecture

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GENTLEMEN,—It has devolved upon me this year to deliver, in accordance with prescribed custom, the introductory lecture to the course of systematic instruction upon which you are about to enter. At the outset I am free to confess that I have been not a little perplexed and troubled about what I ought most fitly to say; like many of my predecessors in the office, I have found the choice of subject beset with difficulties, and I have small hope that I can say anything to redeem the usual barrenness of the occasion. It is just twenty-five years since I, sitting where one of you now sits, listened to my first introductory lecture from the lips—mute, alas! now for ever—of one whose pure and gentle nature attracted in no common measure the esteem, the respect, and the affection of all who knew him. I mean the late Dr. Parkes. It is an extraordinary, almost an unparalleled, thing to say of any man, that no one who heard mention made of his name ever heard an ill word said of him; but I believe that this was strictly true of Parkes. His life, lovely and of good report throughout, was indeed a practical refutation of the saying, "Woe unto you when all men shall speak well of you." If I could sketch in striking outline the features of his character, and set forth justly the pure course of his life—showing with what patient industry and entire sincerity of insight he worked in scientific inquiries, how upright he was in all his ways and how kindly considerate to others: how he lived, and how, his work faithfully done, he died,—I should probably give you an inspiring and most useful introductory lecture; for I should present to you a noble example, the labour to imitate which would be an excellent scientific and moral training. But that has been done with more or less completeness by various persons, though not always, perhaps, with the discrimination which one would wish to see shown in the appreciation of such a character. It is a very amiable wish to say everything good of a man when he is silent for ever, and the vocabulary of flattering words is apt to be exhausted in the endeavour to gratify this feeling; the effect sometimes being that the actual features of the character are blurred, and something which is intended to be very perfect, but which is very unreal, is produced. It seems to me that the distinguishing characteristic of Parkes, that by which mainly he was what he was, was not so much originality or height of intellect (in this others have equalled or surpassed him) as the height of his moral stature—in this perhaps he has hardly ever been surpassed; and that the grand lesson to be learned from the extraordinary esteem and affection which he inspired, from the infection of earnestness and sincerity which spread from him, and from the elevating influence which he exerted upon those who were brought into close converse with him, is a lesson which the history of human progress through the ages teaches too, and which needs much to be had in remembrance in these days of the glorification of science. It is this: that great as is knowledge, the moral nature is greater still; that the impulses of evolution which move the world come not from the intellect, but from the heart; that he who would work upon the hearts of others must speak to them from the heart; that everywhere and always we have to recognise the predominance of the heart over the intellect.

Perhaps if I could recall vividly the thoughts and feelings of my mind when sitting there twenty-five years ago, and compare, or rather contrast, them with my thoughts and feelings now, I might extract from the comparison the essence of a quarter of a century's experience of life, and impart to you what it will probably take you a quarter of a century to acquire. But I am doubtful whether that would not be to do you a great disservice. For I could hardly fail thereby to take much heart out of your hopes, much ardour out of your enthusiasm, much energy out of your exertions. Moreover, I feel pretty sure that what I could say, however wisely it might be said, would not be of the least use to you. Neither nations nor individuals profit much by the experience of other nations or of other individuals; they must go through their experience for themselves, learning through suffering, succeeding through blundering, attaining to the calmness of wisdom through the fevers of passion; and many times only when opportunities are gone, and their consequences in irrevocable operation, is it seen perhaps how much better use might have been made of them. No doubt there is wise purpose in this inability of the young to take home and assimilate the experience of those who are older; for I know not how they could preserve that enthusiasm and freshness of spirit which make life itself a joy, and beguile them to pursue with eagerness its aims, were their illusions destroyed, as illusions one after another are destroyed by experience. In the full stream of its young energy life is too little conscious for reflection; to live is happiness enough; in its later stages more and more, as the heart is applied to know wisdom, is it felt to be vanity and vexation of spirit. This may seem a hard doctrine, but it is true; it has been the experience of the greatest sages of all times; it is the central thought of the great religious systems of the world.

Let me pass, however, from reflections which, if pursued, might tend to dishearten rather than to hearten you, and endeavour to show you that, as things go, you have made a good choice of a profession for your life's work. I should be thought to have ill discharged the function of introductory lecturer by preaching a gospel of pessimism, and inoculating you at the outset of your career with a despair of the littleness of life. Whatever the motive which has made you choose the medical profession as your life-career—and I suppose this has in most cases been the advice or example of others, or perhaps some quite accidental influence; for it is a startling consideration on what little circumstances the great issues of life often turn—you will not, I think, ever have cause to regret your choice if you look to the higher aim of it, and to that which is the proper end of human life. But on that condition only. It is not a profession which one who is ambitious of worldly distinction, or eager to accumulate much riches, should choose. You might, with prudence and industry, get vastly richer on the Stock Exchange or in commerce in a short time, than you will probably after the labour of a long life in medical practice; and if you would aspire to gain a peerage or other ornamental thing of that kind, you would have done better to have gone into the army, and to have set before you as an aim, not the saving but the destruction of life; or to the bar, and have sold the highest exertions of your intellect to advocate the cause, whether the cause of the oppressor or of the oppressed, for which you were retained. Peerages don't come our way, and I am heartily glad that they do not, for I much fear that there would not be the strength of mind to reject them; that a pitiful social ambition might tempt us to spoil the simple intrinsic nobility of our vocation with the outworn decorations of a childish stage of human progress. If medical practice be pursued as a mere means of money-getting, assuredly it causes the deepest demoralisation of him who so uses it, as best things turned to basest ends breed the greatest corruption. He who deliberately applies himself to take the utmost advantage of the suffering and the feebleness of humanity, coming to him for aid in its anguish and its utter helplessness, in order to make his profit—and we may hope there are not many creatures of that vileness in the profession—may have large success in his low aim, but he discovers a meanness and a degradation of nature which are a grievous shame to his kind, and which devils might almost disdain.

But if you look to what is the true end of knowledge and work—to relieve the suffering and to minister to the comfort of man's estate, to lessen the sum of human sorrow on earth,—you have chosen a profession which yields the fullest satisfaction to your aim and the largest scope to your work. We learn in order to act, the end of all knowledge being action; and the end of all action is to promote the welfare and the progress of mankind upon earth. In no profession are the opportunities of doing this good work so great and constant as in ours; to the least of us, as to the greatest, occasions

of tender sympathy and patient help occur every hour in the daily routine of our work; and no profession, therefore, rests so little for appreciation upon any adventitious circumstance of time or place, or so little needs extraneous titles of honour to give it dignity and respect. Put a doctor in the midst of the wildest savages, and they will respect the "medicine man," when the lawyer's fluent sophistry and the preacher's pathetic eloquence would not gain them consideration, or even save them from death. Livingstone passed unharmed and esteemed among the savage tribes of Africa under the protection of his medical skill; and Christ himself cultivated the character and functions of a healer of disease, not only because in that capacity He went about doing good, but probably also, as De Quincey surmised, for the secret reason that He thus disarmed the jealousy and suspicion which the ruling authorities might otherwise have felt of the crowds which He drew about him. When the mighty fabric of the Roman Empire, penetrated by internal decay, at last fell to pieces under the successive assaults of the Goths and the Vandals and the Huns, many thousand persons were, as Gibbon tells us, taken captive and distributed through the deserts of Scythia; and it is interesting to note what was the relative value of persons under these circumstances. "The skill of an eminent lawyer would excite only their contempt or their abhorrence. The vain sophist or grave philosopher who had enjoyed the flattering applause of the schools was mortified to find that his robust servant was a captive of more value and importance than himself. But the merit of the physician was received with universal favour and respect: the barbarians who despised death might be apprehensive of disease." So long as man deems it the most important thing in the world to him that he should go on living—and he does that commonly as long as he is alive—so long will he hold in favour and esteem him whom he believes able to prevent or to mitigate the suffering of disease, and to keep at bay "the last enemy," death. It has always been so. "Honour a physician with the honour due unto him for the uses which ye may have of him; for the Lord hath created him."

Having seen how good a thing is the direct work of relieving suffering by medical art, let me now go on to point out that the training through which you go in order to fit yourselves to do this is excellently well adapted to make the most of your intellect as an instrument of knowledge. It seems to me that no education which is given anywhere, taking it all in all, is better than that through which it is necessary to go in order to become a thoroughly accomplished physician. You are brought into direct contact with the facts of nature, face to face with them, from the beginning of your course; step by step you advance in the practice of observation and reflection from more simple to more complex phenomena, and so you learn to make the order of your ideas conform gradually to the order of nature. That is real instruction; moreover, it is instruction at first hand. In intercourse with nature sophistry and pretence avail nothing; sincerity and humility and veracity of mind are essential; we must learn patiently her laws, and, learning, obey them, or we ourselves, our contemporaries, or our posterity will suffer infallibly from their violation. There is no possibility of hoodwinking those eternal laws which, in our dealings with them, never make a mistake and never overlook one, never forego an advantage, never shrink to exact retribution, never feel remorse. When a person leaves college with a very respectable knowledge of Greek and Latin authors, and with little or nothing more than that, it seems preposterous that he should think himself an educated person. If he has learned nothing about the stars above his head and the earth beneath his feet; nothing about the nature of the air which he breathes, of the water which he drinks, of the food which he eats; cannot tell why water rises in a pump, or how a man breathes, and why he dies if he cannot get air to breathe; knows nothing whatever of the laws of the world in which he lives and of which he is a part,—he is surely a profound ignoramus, notwithstanding that he may be able to make indifferent Greek or Latin verses. I would not for a moment undervalue the priceless benefits of a knowledge of Greek and Latin authors; on the contrary, I am sure that a study of the works of these great minds of antiquity, full as they are of the rich stores of human observation and thought, expressed in the most chaste, concise, and finished language, produces a discipline of intellect and a refinement of culture which can be got in no other way, and the loss of which in youth nothing gained afterwards will ever entirely compensate for; but I am sure also that if Plato or Aristotle or any of those great thinkers of antiquity were to live again now, he would look with amazement and compassion, if not with contempt, on men who are content that education should consist in studying only the writings of the past, in utter neglect of the wonderful works of nature to which the later ages of mankind have gained access, and of the vast stores of knowledge which have been gradually accumulated by the patient labours of successive generations of men. He would be apt, I think, to say something of this sort, "Good heavens! we lived more than two thousand years ago; have you in all that time gained no new experience of men and things which it would be well to make an essential part of the intellectual culture of your children? Is it education enough for life now to let them learn from us what we thought of men and things more than two thousand years ago, and to train them in a study of the structure of our dead language?" To state the matter so sufficeth to expose its absurdity.

Now, the training of a medical man, when thorough, is admirable in this respect, that it follows the order of nature, beginning with the less complex and rising to the more complex sciences, using the lower as a ladder by which to mount up to the higher. Coming to his work, as he certainly should do, with a fair knowledge of mathematics and physics, he proceeds to the study of chemistry, and passes on thence to the study of physiology; so he lays deep and firm the scientific groundwork for the study of the disorders of the structure and functions of the body, which is to be his ultimate special work. Without the foundations of the pre-requisite studies he will not be a thoroughly well-grounded and cultivated physician, who may be relied upon to perfect his knowledge by experience through life, although he may no doubt be a fair practitioner in the routine which he has been taught, or, if he devotes himself to surgery, skilful as a mere operator. A knowledge of the simpler and more general science is an essential pre-requisite to the study of the more complex and special science. Physics lie beneath chemistry; in physics and in chemistry we search for those intimate operations of matter which lie at the foundation of physiology; and physiology in its turn is essential to the construction of the more complex science which is concerned with man in his social relations—that is, sociology. And I may observe, by the way, that psychology, which is an important study for the man who has to put right the disorders of the minds and bodies of his kind, demands not only a thorough knowledge of physiology, but observation, also, of man in his social relations. Each science rests upon the one below it, but reflecting the increasing complexity of nature as we rise from the movements of masses to the movements of molecules of matter, and to the combinations and relations of atoms, from dead again to living matter, from the simplest forms of life to complex organisms, and from organisms to the social union of organisms, contains in ascending scale something more than the science below it—something which constitutes its autonomy as a science. Physiology being placed in this scale, as you perceive, between chemistry and sociology, is on that account a most instructive study at the present time, when chemistry has made great progress towards scientific exactitude, and when the cultivation of the new field of social science is just being entered upon; there is no science, in fact, which yields such rich promise of large discoveries in the immediate future, and no science the discoveries of which, when applied to human needs, will do so much to lessen physical suffering. Fortunate are you, then, in the training which prepares you for the study, and in the lot which at this particular era has fixed your work in the pursuit, of a science which promises so great an abundance of good fruit.

One warning I would stop a moment here to urge. While recognising the subordination of the sciences, we ought not to overlook the fact that all the sciences are at bottom artificial divisions; that the world is not divided rigorously into those different domains which we call physics, chemistry, physiology, and the like; that we make the divisions for our convenience according to the complexity of the phenomena, not because we discover them in nature. Nature is one and continuous, and takes not the least notice of the arbitrary divisions which we find it necessary to make. It would seem a very obvious distinction between plant and

animal; and yet if we push our investigations into that border-territory of nature where animal and vegetable life touch, we meet with so-called monads—the *Heteromita*, for example—which may be referred with equal justice to either kingdom; there are organisms which we think vegetable having characters which we call animal, and organisms which we call animal having characters which we think vegetable; there is, in truth, no line of demarcation, but instead an insensible series of gradations, and no man can say where the one kingdom ends, and the other begins. In like manner, notwithstanding the seemingly gross and palpable distinction between living and dead matter, anyone who sets himself to work to find out where life begins will be hard put to it to draw a line of separation, and more hard put to it when called upon to make good his division. Man himself, much as he makes of himself, is not separated from the rest of nature by an impassable gulf; he modifies nature largely it is true, but the art by which he does that is nature; he is a part of the order thereof—the latest product of the evolution which went on for countless ages before he appeared upon earth, which is going on now in his progress, his knowledge and his moral feelings being agencies in the process, and which, for anything we know, will go on for countless ages after the earth, which he has ceased to replenish and to subdue, has fallen into the condition in which the moon now is, and rolls on its solitary way through space, a cold and desert globe, the tomb of all human aspirations, sorrows, sins, and achievements. In making use, then, of the arbitrary divisions of our sciences we ought never to lose hold of the actual unity and continuity of nature; never to overlook the fact that there is not a single truth in any science which has not its essential relations with the truths of all sciences; never to forget that the least things and the greatest are indissolubly bound together as equally essential elements of the intimately connected and mysterious whole which we call the universe. It may seem a fanciful saying, but there is a truth in it, that you cannot utter an exclamation, strike a note on a piano, move a grain of sand from its place, without affecting the entire universe.

Now the systematic training of the mind in conformity with the order of nature, through patient observation and careful induction, the knowledge of nature which is got by becoming, as Bacon says, her servant and interpreter, is a tedious business. Men therefore have gladly shirked it; they have found it much easier to attribute phenomena to some metaphysical entity which they have created out of a mental abstraction, or to invoke a supernatural cause to account for them, than to find out the explanation. In consequence of this habit of mind, which has had large operation in the past, a body of doctrine has grown up which, having had its day, is now fast becoming effete, but which men will not willingly part with—doctrine comparable, if I may use a physiological comparison, with those organs which, like the thymus gland, have their uses at a certain stage of the body's development, but afterwards, having no longer any function, undergo atrophy. Moreover, men have not only shirked positive inquiry from indolence, but have hated it from hostility. They dread the thought of being shown to be one with nature, and repudiate with abhorrence the suggestion that their bodies and minds will ever receive scientific explanation; as if their bodies and minds would be degraded to something quite different from what they are by being understood like other natural phenomena and described in terms of scientific thought. The supposition strikes them as something like a blasphemy against the nobility of their nature. Hence there is a deep-rooted instinctive hostility to the science that has to do with man, which you will have to take account of in your careers—a hostility which has found partial expression, I think, in the anti-vivisection agitation. There was more in the fierceness of that agitation than a laudable feeling of compassion for the animals—an intensity of acridity betraying another origin. There was the energy of fear and hatred—fear and hatred of the science which threatens the dethronement of man from the pedestal of conceit upon which he has placed himself and the destruction of some of his traditional beliefs. But a little reflection might serve to prove to those who are moved by these hostile apprehensions that they are possessed with an unreasoning fear, and are disquieting themselves in vain. Let them look beyond the dark circle of their self-love, and they will see that what is good in old creeds does not perish; that, although old forms vanish, as generations and nations pass away, that in them which gave life to them does not pass away, but puts on new forms and survives, as new generations and nations follow and carry onward the work of progress. Better would it be for them to seek for and foster the good which survives than to lament and defend the old which is corrupt.

Certainly science has not been careful to avoid occasions of offence in its progress, and of its method and pretensions its votaries have sometimes written in a strain which justly provokes scorn. While proclaiming, then, the praises of observation and induction, and enforcing the value of a mental training which is obtained by studying nature after that method, let me interpose a few words of qualification, in order that I may not be misunderstood. I cannot help feeling that a great deal of questionable doctrine has been propounded concerning the so-called method of induction which science is enjoined rigidly to pursue, and that Bacon would have been aghast had he seen the absurdity which some persons in these days describe as his method, and the imbecile procedures of some of those who believe that they are following it. They talk, in fact, of the method of observation and induction as if it were something to conjure by; a mechanical process of knowledge-getting which rendered superior mental capacity unnecessary; a sort of intellectual ladder by which the most stupid beings, if they only planted it properly, might mount up into the highest places of knowledge. That was not Bacon's notion of it; he perceived clearly enough that a man does not see with his eye, but through it; that seeing in the sense of observation is impossible unless there be behind the eye the intelligence to interpret what is presented to it. The simplest act of perception is indeed more than a mere matter of sense; it is an actual induction or inference in which an important element is contributed by the mind; you cannot look at an ox or an ass, and know either of them to be what it is, without making an induction—can't see, in fact, until you are trained to see. Scientific observation and experimentation—and experiment is only observation aided by artificial means—may be carried on to the last hour of your lives without any result of the least value if you have not a mind trained to interpret. Of what use is it to torture nature by strange experiments if you don't understand her language? You might sacrifice a hundred dogs or cats in cruel experiments, and be not a whit wiser at the end of your awful labours. Nature does not vouchsafe an answer to a scientific inquiry unless the intelligent question be put, and the precise experiment made, as Bacon insisted, *ad intentionem ejus quod queritur*; and it is impossible to put the definite question, or to make the precise experiment, unless there be a prudently formed hypothesis in the mind—that is to say, a hypothesis based upon previous careful training in observation of nature's processes and sound reflection upon them. The mind must be informed by patient and sympathetic intercourse with nature; it is enabled then to make new adjustments by means of the knowledge which it has gained through past adjustments—to frame a new and true theory applicable to new experiences by reason of being stored with sound theories derived from past experiences. We shall do well, then, not to be too much intimidated by what is sometimes said or written in praise of mere observation of so-called facts, and in dispraise of theory, or imagine that any facts can be truly observed, or any science prosecuted with success, unless the well-trained mind co-operates with the senses. As I have said elsewhere, "That some declaim so virulently against theory is as though the eunuch should declaim against lechery; it is the chastity of impotence." Happy is the observer who, when he sets to work, has a good theory in his mind. The mischief is when men theorise who have not been trained in habits of accurate observation, or, I might go a step further and say, who have not inherited from father or grandfather in the foundations of their nature the lines of veracity of observation and thought on which to develop; for when one notices how persons of a certain eager temperament go on discovering facts which are no facts, and, notwithstanding that they are brayed in the mortar of an annihilating criticism, are not in the least benefited by the discipline, one cannot help feeling that the observer, like the poet, is born, not made.

But it is time to return to the direct line of my argument.

From what has gone before, it should appear at what an excellent place of advantage the order of studies for the medical profession is adapted to place you; how wisely it is arranged to train the mind for sound reflection upon those most complex phenomena of nature with which the medical man has to deal—the phenomena of life in health and in disease; and how sadly wrong in theory and mischievous in practice he is likely to be who neglects to lay well the foundations of his mental training. If no practical result were to follow a medical education, if it were not pursued, as it is, for the purposes of the medical art, I believe that one who aspired to fit himself best to understand the world in which he lives and the men with whom he has to do could not do better than go through it; for it would be an excellent foundation on which to build afterwards. The study of man cannot be undertaken with any satisfaction, or carried out with any completeness, except through a previous study of the nature of which he is the present culmination; it is certainly not possible to enter the chamber of the mind without passing through the ante-chamber of the body; and we cannot understand the body unless we understand a good deal of the processes and laws of nature which lie beneath biology. So far, then, Mr. Lowe appears to be right when he regrets, as he is in the habit of doing, that he was taught so much classical knowledge and no science when he was educated, and contrasts the disadvantages under which he laboured with the advantages which each student at a middle-class school now enjoys. Newspaper critics think that he is making jokes or firing off paradoxes, and would seemingly rather have Mr. Lowe as he is than Mr. Lowe as he might or would have been; but I am disposed to think that Mr. Lowe's insight has enabled him to see what his critics quite fail to see—that the statesman who has to deal with the relations of men to one another in the world would be better qualified for his work if he had a good fundamental knowledge of the laws of man's nature and constitution and of the laws of the world in which he lives. The scientific statesman—when we get him—will hardly deem it his highest achievement to shrink scared from the grasp of a principle, or his supreme privilege and merit to wait patiently to catch the fitful gusts of an ignorant public opinion.

The application of the principle which I have been enforcing, of learning to know man through nature, the thorough knowledge of his environment and of those of his relations to it which constitute his life, must clearly be the foundation of a scientific medicine. Here, as elsewhere, prevision for the purposes of action is our aim; we observe and infer in order to foresee, and, foreseeing, to modify and direct; we conquer by obeying, gaining a knowledge of the phenomena of living beings in order to make ourselves master of them, just as by a knowledge of physics and chemistry we gain a mastery over the phenomena of physical nature. It is impossible to treat a sick person, except in the most lamely empirical fashion, without a knowledge of the properties of the organism and of its relations to its environment; for our medical function is to remove the disorder of these relations, which is disease, and to restore the harmony, which is health. In past times it has been too much the practice to treat the body as if it were an entirely independent kingdom, without regard to its essential relations with surrounding nature, and to try to drive out the enemy which was supposed to have taken possession of it, by pills and potions, as barbarous nations try to drive him out by charms and ceremonies. Now, however, in the recognition of the intimate and constant relations between the organism and its surroundings we are awaking to juster views of our duties as observers and of our work as curers of disease; but it is because of the absence yet of anything like exact knowledge in this respect that medical practice is defective, tentative, empirical, often mere guess-work, and that the most experienced physicians, waiting patiently on nature, aim to do the least harm by the drugs which they employ.

But we are perceiving more clearly day by day a larger application of this principle of looking to the relations of man, to what is around him as well as to what is within him, in the fulfilment of the great purpose of preventing disease. It is in this direction that the future course of medicine lies clearly open, and to this end that we must work; it will rise to the true height of its great vocation when it watches over communities and ministers to the welfare and development of the race. I am apt to think that we shall attain to earlier and larger success in preventing the diseases of communities than in curing the diseases of the individual, as men who had been seeing heavy bodies fall to the earth every moment of their lives discovered the law of gravitation for the first time when they began to observe the grand general motions of the heavenly bodies. Indeed, we have already had encouraging success. Look through the yearly death-list of this great city two hundred years ago, and you will find a large proportion of deaths ascribed to diseases which have now been robbed of their sting, if they are not quite extinct. Many persons died then, as "that chief of men," Cromwell, did, from ague. Where is the mortality of ague now? Ague has disappeared with the disappearance, through better drainage, of the damp fogs which occasioned it, as ghosts and other superstitions have vanished with the disappearance, before the light of knowledge, of the fogs of ignorance in which they were engendered. Bloody flux or dysentery seldom occurs now in this country, and is more seldom fatal, but it caused many deaths two hundred years ago. The ravages of small-pox were then terrible, hosts of victims being carried off by it, and many persons who escaped death bearing its marks in blind eyes and hideously-scarred features; but I think we may foresee a time when, Keighley guardians notwithstanding, small-pox will no more afflict a prudent people. Plague, scurvy, and spotted fever, each of which then claimed regularly its yearly tribute of victims, are becoming almost diseases of the past, and one needs not a prophet's imagination to foresee a time when cholera, scarlatina, fever, phthisis perhaps, and other diseases, will be no more; when preventive medicine shall have reached such a degree of perfection that the occurrence of epidemic disease will be felt as a gross reproach to the community, and when there will be comparatively little for the practitioner to do in the treatment of particular disease. It is unfortunate truly, as it is sadly unseasonable, that just when we see before us this fairer prospect, and when an encouraging beginning of progress has been made under the auspices of Mr. Simon and his well-organised staff, he should have been driven from office and his office abolished. But one instance more of the difficulties with which progress has to contend from the selfish intrigues and obstructive apathy of mankind!

You may be disposed perhaps to smile at my outlook as fancifully bright, and befitting only the imaginative flights of an introductory lecture. From the beginning, it may be said, men have, through unrestrained indulgence of their passions, generated disease, and however pure their surroundings may be made, they will go on doing the same thing: were a clean sweep made of all disease from the face of the earth to-morrow, they would breed it afresh before to-morrow's morrow. No doubt as they are constituted and trained at present they would be apt to do so; but one may hope that the medical science of the future—and here I would carry your imaginations a little way with me—will have a great deal to say in the way of instruction respecting the highest concerns of man's nature, and the conduct of his life; that it will enter a domain which has hitherto been given up exclusively to the moral philosopher and the preacher. I don't propose or suppose that we shall ask these gentlemen to step down from their platform, saying to them something of this kind, "You have been preaching wisdom and goodness of conduct for some thousands of years, and you haven't made much of it. Certainly one result thus far is striking enough: that men are devoting their eagerest energies to making the most destructive guns, and are conferring their greatest honours and applause on those who use them with the most destructive effects. For months, until quite lately, the soil of Eastern Europe was deluged with blood, shed amidst unspeakable atrocities, in an entirely needless war, which your statesmen, presumably the highest products of the culture of your epoch, could or would do nothing to check. Stand aside, then, and let us try our method." To speak so would be as foolish as it would be arrogant; but we may perhaps, without undue presumption, promise them that if they will learn and use the results of our method, they will have a deeper and more stable foundation in the constitution of human nature for their teaching than they have now, and will add much to the efficacy of it by enforcing motives which will touch more keenly the springs of human conduct than those which they present. Now let me indicate very

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briefly, as must needs be, the method by which medical science is to advance to take possession of this higher ground.

Starting with the trite maxim that before we can act we must learn, it is obvious that before we can teach men to act with more wisdom than they have done in the past, we must give them a better knowledge of their own nature and relations than they have had. This we propose to do by the patient and steadfast application of the method of observation and induction, which has served us so well in the subordinate branches of science, to the highest phenomena of man's being—his thoughts, feelings, and conduct. The problem is the same here, in fact, as in the lower sciences—to observe in order to foresee, and to foresee in order to modify and direct; and the method is the same. Admitting, as I see not how we can help doing scientifically, that a process of evolution has gone on in nature, and that man, as he now is, is a product of the past carrying on this process in his progress to a higher purpose in the future, it is a natural conclusion that he must, as a part of nature, be studied by the same method as the rest of nature. We have to search back and find out how he came to be what he is by looking to the historical evolution of the race from its earliest known conditions, and by tracing in the development of the organism the operation of laws which we discover at work under less complex conditions in the rest of nature. When we do that, we find the best reason to believe that the highest faculties of his mind, his intellect and his moral feelings, have not been implanted ready-made in his nature at any period of its history, but have been the slowly won results of the accumulated experiences of the race transmitted by hereditary action: that is the lesson which observation and induction, applied to the investigation of the origin and development of man's higher nature, teach with an authority which cannot be gainsaid from any standpoint of positive knowledge. I could have wished, had I had time, to have shown you how some phenomena of mental disease, which may be looked upon in this relation as instructive experiments of nature made for us in a domain where we cannot make them for ourselves, confirm the induction which has been reached by observation of human development, both in the individual and in the race. But I must leave that unsaid, and restrict myself to the conclusion as regards conduct which results from the acknowledgment that the latest and best acquisitions of man have come to him by a process of ordinary development through the ages. For the problem of to-day is truly no longer the schoolmen's much vexed question of the origin of evil, but the question of the origin and growth of good. Our plain duty is to find out the laws which have been at work in that process, and to continue it—to carry on, by deliberate method, with conscious purpose, the development which has been going on through past ages irregularly and blindly. The time, in fact, has come when mankind should awake to the momentous reflection how great is the power which it may exert over its own destiny, and to the resolution methodically to use it. In fulfilling this paramount duty, upon whom will the function of inquiry and instruction immediately rest, but upon those who make the laws of vital development and function their study, and the application of the knowledge to further the wellbeing and development of the organism their work? Clearly, the medical investigator need not lapse into despair because he has no new conquests to make.

You will not be long in practice before you will have many occasions to take notice how little people ever think of the power which they have over their own destiny and over the destiny of those who spring from them—how amazingly reckless they show themselves in that respect. They have continually before their eyes the fact that by care and attention the most important modifications may be produced in the constitution and character of the animals over which they have dominion—that by selective breeding an animal may almost be transformed in the course of generations; they perceive the striking contrast between the low savage with whom they shrink almost from confessing kinship and the best specimens of civilised culture, and know well that such as he is now such were their ancestors at one time; they may easily, if they will, discover examples which show that by ill living peoples may degenerate until they revert to a degraded state of barbarism, disclosing their former greatness only in the magnitude of their moral ruins;—and yet, seeing these things, they never seriously take account of them and apply to themselves the lessons which lie on the surface. They behave in relation to the occult laws which govern human evolution very much as primeval savages behaved in relation to the laws of physical nature of which they were entirely ignorant—are content with superstitions where they should strive to get understanding, and put up prayers where they should exert intelligent will. They act altogether as if the responsibility for human progress upon earth belonged entirely to higher powers, and not at all to themselves. How much keener sense of responsibility and stronger sentiment of duty they would have if they only conceived vividly the eternity of action, good or ill, if they realised that under the reign of law on earth sin and error is inexorably avenged, as virtue is vindicated, in its consequences; if they could be brought to feel heartily that they are actually determining by their conduct in their generation what shall be predetermined in the constitution of the generation after them. For assuredly the circumstances of one generation make much of the fate of the next.

In the department of medical practice in which my work mainly lies I have this amazing recklessness strongly impressed upon me; for it occurs to me, from time to time, to be consulted about the propriety of marriage by persons who have themselves suffered from insanity, or whose families are strongly tainted with insanity. You will not be surprised to hear, I dare say, that I don't think anyone who consults me under such circumstances ever takes my advice except when it happens to accord with his inclination. The anxious inquirer comes to get, if he can, the opinion which he wishes for, and if he does not get that, he goes away sorrowful, and does just what his feelings prompt—that is, gets married when he has fallen in love, persuading himself that nature will somehow make an exception to inexorable law in his favour, or that his love is sufficient justification of a union in scorn of consequences. Certainly I have never met with so extreme a case as I chanced to light upon in a book a short time ago. "I actually know a man," says the author, "who is so deeply interested in the doctrine of crossing that every hour of his life is devoted to the improvement of a race of bantam fowls and curious pigeons, and who yet married a mad woman, whom he confines in a garret, and by whom he has insane progeny." But I have met with many instances which prove how little people are disposed to look beyond their immediate gratification in the matter. If it were put to two persons passionately in love with one another that they would have children one of whom would certainly die prematurely of consumption, another become insane, and a third, perhaps, commit suicide, or end his days in workhouse or gaol, I am afraid that in three cases out of four they would not practise self-denial and prevent so great calamities, but self-gratification, and vaguely trust "the universal plan will all protect!"

Those who pay no regard in marriage to the evils which they bring upon their children, or in their lives to the sins by which the curse of a bad inheritance is visited upon them, may plead in excuse or extenuation of themselves the vagueness and uncertainty of medical knowledge of the laws of hereditary action. We are unable to give them exact and positive information when they apply to us, and they naturally shelter themselves under the uncertainty. Were our knowledge exact, as we hope it will some day be, we could foretell the result with positive certainty in each case, and so speak with more weight of authority. It is one of the first and most pressing tasks of medical inquiry to search and find out the laws of heredity, mental and bodily, in health and in disease, and having discovered exactly what they are, to apply the knowledge purposely to the improvement of the race—that is, to prevent its retrogression and to promote its progress through the ages. I see no reason to doubt that by discovery of these laws and intelligent practical use of our discoveries we might in the fulness of time produce, if not a higher species of beings than we are, a race of beings at any rate as superior to us as we are superior to our primeval ancestors; the imagination of men seems, indeed, in the Gods which they have created for themselves, to have given form to a forefeeling of this higher development. But I will not pursue this pregnant matter further now; I have touched upon it only for the purpose of illustrating the large scope of the medical

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work of the future, which is to discover those laws which have been in operation through the past to make man the superior being which he is, and to determine his future action in intelligent conformity with them; not only to cure disease of body and mind, as it has aimed to do in the past, and to prevent disease, as its larger aim now is, but to carry on the development of his nature, moral, intellectual, and physical, to its highest reach.

So much, then, concerning the three topics on which I have proposed to myself to discourse in this lecture—namely, the nobility of your direct function as healers of disease, the excellence of the method of medical study as a means of intellectual and moral training, and its fruitfulness in benefits to mankind, and the grandeur and the reach of its aspirations for the future. Let me hope that I have, in fulfilment of my design, said enough to satisfy you that you have made a good choice of a profession for your life's work. Having chosen, it remains only that you should justify your choice by your work, so that it may be said of each of you when his long day's task is over and the night has come, that he was in his right position in the world and made a right good use of it. Life has its three stages—youth, manhood, and old age; let it be your anxious care now, in the first stage of joy and hope, so to pass the second stage of work and duty that the last stage may not be a long regret.

I will ask your indulgence only for a few minutes more, while I detain you for one or two final reflections of what I may call an inhibitory character. In pursuing resolutely the course of scientific inquiry which I have indicated, it must needs be that offences sometimes occur, for we can hardly fail to come into collision with some of the prejudices and traditions of mankind. I do not know how it is possible, for instance, to prosecute the physiological investigation of mind to its furthest reach without shaking the foundations of the metaphysical notions which have been held concerning it and its functions; and with the fall of these notions, long cherished of mankind, other notions that are bound up with them may totter to their fall. But if this must be, we shall do well to acknowledge it more in sorrow than in anger. Let us not rush with eager fury and exultant clamour to the work of destruction; it behoves us, as products of the past, who will one day ourselves constitute the past, to deal gently and even reverently with it. We cannot break with it if we would, nor should we if we could. The very language which we use we owe to the slow acquisitions of generations which have preceded us; we cannot compassionate or contemn them except in words for which we are indebted to them. There is hardly a word I have used in this lecture which, were its history searched out, does not mean generations of human culture to which we are heirs. Seems it not then a wicked, almost a sacrilegious, thing to hasten with eager gladness to repudiate the past to which we owe everything, and to exult over the ruins of its beliefs? It is as if a son should rejoice over his father's feebleness, uncover his nakedness, and make scorn of his infirmities. As he who has been the best son is in turn the best father, so the generation which guards with respect the good which there is in the past, and puts gently aside that which is effete, will make the most stable progress in its day, and transmit the best inheritance to the generation which follows it. No doubt in the future, as in the past, the knowledge of one period will sometimes appear foolishness at a more advanced period of human evolution—the truth of one age become the laughing-stock of the next; but we may profitably reflect that decaying doctrine had its use in its day, and it may teach us modesty to consider that much which has its place in our mental organisation now, and is serving its proper end in the development thereof, will one day probably be put aside as obsolete belief. Let it be our prayer that when that day comes, and this generation comes up for critical judgment as a historical study before the tribunal of posterity, it may be justly said of it that it has done as much for the progress of mankind as some of the generations upon which the wisest of us look back perhaps with indulgent compassion, and the unwise among us with foolish scorn.

There is nothing in the attitude of modern society towards science, cold and suspicious as it may sometimes be, which necessitates or warrants an arrogant, defiant, and aggressive spirit of hostility on its side. No great courage is required nowadays to declare a new truth, however hostile it may be to received belief, nor is any serious suffering entailed by the declaration; there is no need therefore for a scientific man to put on the airs of a martyr. He is a very little martyr who is persecuted only by the pens of unfriendly critics, and rather a pitiful object when he sits down by the wayside, and calls upon all them that pass by to behold and see how hardly he is used. It was very different when science first made its voice heard; when, under the cruel persecutions of the inquisition, Galileo unsaid with his tongue truths which his heart could not unsay, and that grand figure in the noble army of scientific martyrs, Giordano Bruno, went calmly and resolutely to the stake rather than utter one word of retractation. The saddest contemplation in the world perhaps is that of the brave who, like him, have died fighting in the battle for the cause that seemed to perish with them; whose lives of suffering and sore travail have set, often through cruel tortures, in black clouds of gloom which no ray of hope could penetrate. Theirs was not the laurel crown of victory after the agony of the struggle; no popular applause, no encouraging shout, greeted their ears as they sank down exhausted in death; the shouts which they heard were shouts of execration, and their crown was the martyr's crown of thorns. We have, happily, fallen on better days; the secrets which we win from nature we may proclaim without fear, and in the confident assurance that, after being proved and tried, they will be accepted; we are fighting a winning fight, and the stars in their courses are with us. What cause, then, for arrogant self-assertion, overbearing aggression, and wilful determination to seek occasions of offence? The advantages of our position and strength entail the responsibility of moderation and forbearance, for the strength is not our own—it is the power of the universe working in us to its higher ends.

One may esteem science duly, then, without feeling sympathy with the aggressive delight with which some persons accentuate its hostility to expiring doctrines, and exult in the overthrow of articles of faith which have sustained and solaced multitudes of men in the dark hours of life and in the darker hour of death. It can be no pleasure to a generous nature, inevitable though it be, to shatter the faith of even the poor Indian, who, driven from his hunting-grounds by the inexorable fate of a stronger race, looks upwards with feeble faith to a Great Spirit, and forwards with dim hope to the happy hunting-grounds far away where the sun goes down. To aspire to be the first to proclaim the downfall of a position of refuge to which men have clung with passionate earnestness for many generations seems to show "a pitiful ambition in the fool who uses it," a singular blindness to the essential continuity of development, a strange ignorance of what is the final end of all science. A scientific discovery is a very good thing in its way, but it is only a means to an end after all—the improvement of man's estate—that is to say, his moral and intellectual as well as his material state; and when he who has been happy enough to discover a new metal or a new star or a new cell or a new salt magnifies himself mightily, and fondly dreams of an immortal fame, one cannot help some such feeling of the ludicrous as would be raised by the spectacle of a hodsman who, having carried his brick to the building in course of construction, should call upon all the world to take notice of the wonderful work which he had done in architecture. Science has yet to realise, at any rate its cultivators seem oftentimes to forget, that its end must be constructive; that after analysis must come synthesis; that all the analytical work in the world will leave matters in a chaotic state until the constructive spirit, moving over their surface, shall organise the incoherent results, and make them serve for a higher social development. The problem is to make straight in the future a highway over which mankind may pass to a higher life. The philosopher who, with far-reaching eye, overlooks the relations of sciences; the poet who reveals subtleties of human feeling, gives lofty utterance to human sympathies with nature, and infuses nobler aspirations into men; the preacher of human brotherhood who, inspired with strong moral feeling, proclaims the lessons of self-renunciation and of duty to neighbour; these are brighter stars in the firmament of human genius than the scientific discoverer. The discovery of the law of gravitation is the grandest attainment of scientific thought; but can we justly compare the

effects of that generalisation upon human interests and happiness with the elevating influence which is exerted by the poetry of Isaiah or of Shakespeare upon multitudes throughout the world; which is perhaps being felt at this very moment by fireside or on sick-bed in distant lands—by the solitary dweller on the skirts of the vast forests of Western America, in the great lone land of Canada, in the farthest depths of the Australian bush? Science has not rendered the philosopher, the poet, and the moral teacher superfluous, nor will it ever supersede them; on the contrary, it will have need of them to attain to its own perfect working to the bettering of man's estate; and it may well seem to some that the time has come when its manifold scattered and somewhat anarchical results should be penetrated by the synthetic insight of the philosopher, be embodied in forms of beauty by the poet's imagination, and utilised by the moral teacher to guide and promote the progress of mankind. So long as man sees splendour in the starry heavens, beauty in the aspects of nature, grandeur and glory in self-sacrifice, so long will he feel that his brief conscious life is but a momentary wavelet on the vast ocean of the unconscious; that there is in him the yearning of something deeper than knowledge, which "cometh from afar," and which the laboured acquisitions of science will ever fail to satisfy.

Abstracts
OF
INTRODUCTORY LECTURES
DELIVERED AT THE
MEDICAL SCHOOLS OF LONDON
AT THE
Opening of the Session 1876-77.

CHARING-CROSS HOSPITAL.

INAUGURAL ADDRESS BY DR. MITCHELL BRUCE.

AFTER bidding the students welcome, and referring to the recent changes in the medical staff and the rebuilding of the hospital, Dr. Bruce proceeded to speak of the first essential for the improvement of Medicine—the education of those who profess it. Besides the means of medical education, and the result, the process involved a third element, namely the *material*. Enough had been said already on the necessary qualities, mental and bodily, of the medical man. This had been generally done from the side of the profession; the full-fledged practitioner had been considered, and the question asked whether he was intellectually and physically fit for his work. But there was another side from which the result had to be regarded. Besides the finished article there was in the process of every manufacture what was vulgarly known as "waste material," or "bye-product"; and the process of making medical men was no exception to the rule. It was of this bye-product that he would speak. The finished article—which, goodness knows, was often poor enough—had received sufficient attention elsewhere. It was hardly creditable to the profession how little regard had been given to this residuum, how ignorant they seemed to be of its amount. It was a fact that 20 per cent. of the men who were registered as medical students never registered as medical practitioners; that exactly twenty per cent. of those who began the study of medicine never completed it.

There were, obviously, many possible causes to be found for this failure—death, bad health, change of tastes, and a multitude of other circumstances, uncertain and unavoidable. But about the chief cause of the high percentage of failures there could be no uncertainty. Last year, at the the College of Surgeons, 36 per cent. of the candidates failed in the primary examination, and more than 24 per cent. in the pass. These proportions supported the preceding. Roughly speaking, then, 20 per cent. of the men that began medicine never became qualified, and the majority because they failed to pass the examinations. This wretched residue, this bye-product of medical men, seemed to be systematically neglected. With the loss of precious time, and heart, and health, and it might be character, they were driven back upon the world. Manifestly the chief cause of this distressing result was the student himself; the material would not make into professional men. The student entering his profession was unfit to follow it, and being allowed to enter it, his final disappointment was well-nigh assured.

Dr. Bruce adduced facts in support of this conclusion, and quoted certain remarks of Dr. Haldane at the last meeting of the General Medical Council. He added that he had himself been assured by a distinguished examiner in arts in a Scottish university, that in the preliminary examination in medicine the result would have been simply ridiculous if he had insisted on any reasonable standard of knowledge, and that he had therefore to pass all that reached or exceeded the average attainments of the candidates themselves.

It was with the General Medical Council that the whole responsibility must be held to lie of allowing hundreds of young men to register every year as medical students who could positively never hope to pass another examination. While every intelligent manufacturer did not rest in trying to improve his process until he had reduced the bye-products to a minimum, the profession of medicine seemed to care nothing about waste of life and character, provided the article was, as they called it, finished. The remedy for this unhappy state of matters was not far to seek: it consisted in raising the standard of the entrance examinations; in stopping uneducated men at once. And, if this were done, the number of men that actually finished need not be greatly reduced; only the majority of those would be stopped who were morally bound to be rejected.

Dr. Bruce next passed on to consider the *means* and the *method* employed in the process of medical education. These were very far from perfect, and failure was sadly frequent. The remarkable fact that very good—sometimes the very best—men were among those who failed was, he believed, the key to the problem. He believed that the prime cause of the inability of so many good men to acquit themselves before their examiners was to be found in the system of learning presently in vogue, and of which the direct outcome were three serious evils—(1) unscientific, non-rational, unreal acquaintance with the subject; (2) an undeveloped or misdeveloped mind; and (3) want of mental resource and confidence. For example, in learning anatomy and physiology the student might be taught three things—first, human morphology; secondly, general anatomy and physiology; and, thirdly (and most important of all), the cultivation of his reasoning faculties. It was not too much to say that the student of anatomy and physiology laid down during these first two years the lines of his future intellectual structure. According to the plan he followed now, a man might manifestly make or mar himself. But note how the student of the period proceeded. First, he comparatively neglected physiology—just as certain of the examining bodies had until recently systematically underrated its importance. The loss to the student by this systematic neglect of physiology, such a precious means of mental culture, was incalculable. In the second place, having magnified anatomy into unreasonable importance, he studied it in a wrong fashion. He found two provisions for acquiring a knowledge of this subject—(1) personal investigation of the human body by dissection, as pure human morphology; and (2) lectures and the perusal of scientific literature, where human morphology was treated as a branch of general anatomy, and considered in all its relations and applications, scientific and practical. The student made light of the latter; spent his days in the dissecting-room in being drilled by the demonstrator; and passed his evenings over some wretched "compilation" or "condensation" of his subjects, or in being crammed by his tutor. This evil might be called the *abuse of the tutorial system* of education. It was but a few years since so-called "practical" teaching by the tutor and demonstrator, in lieu of excessive lecturing, became at all general, and already the method was seriously abused, and the evils of the opposite

excess were everywhere visible. For, first, the student did not use his opportunities in the dissecting-room to the best advantage; he forgot all but the immediate purpose of the study of human anatomy; he only accumulated facts, and most seriously disregarded his own intellectual training. He did not regard his practical anatomy as a matter of personal investigation. He was not directed how to work and how to think and then let alone, but had everything, even thinking, done for him, and he ended by being unable to act when it was needful, and to think for himself. And so in the hour of examination he had no self-possession or confidence, for he did not know himself; his faithful demonstrator or tutor was no longer by his side. He was said to "lose his head" before his examiner, but the truth was he never had one. But, beyond the *bad system* in the dissecting-room; in spending *so much* of his time there the student seriously neglected the second provision for study—lectures and sound reading. It was a matter of the greatest concern that anatomy (and, indeed, so many other subjects), as learned nowadays, was but a mass of facts; that with many examiners excellence was estimated by amount of information, and intelligent acquaintance comparatively at a discount. How widely different were the concrete facts of morphology of an adult human body from scientific anatomy. The mind was made a mere storehouse of facts, while it remained ignorant of scientific biology, incapable so far of reasoning, and helpless before a sharp examiner. Thirdly, the student of anatomy had an opportunity of cultivating *the scientific method*. In the future practice of his profession, the present student would have to deal with pathology and therapeutics. Given effects, he would have to discover causes; given causes, he would have to observe effects; and he would have so to combine and apply this dual knowledge, as, if possible, to prevent, arrest, and remove, by certain causes—therapeutical measures, certain effects—pathological states. How far was the average junior student of the day being trained for such a future? As a student of mere human morphology, his work was simple observation of unvarying nature, and even such observation was too frequently not his own. The medical man that had been trained on the *system of practical cram* looks only for what, according to his formula, should be, and will be blind to other circumstances, or neglect them as non-material. Ignorant of the value of variation, blind to all but uniformity, he will not wait for nature to vary. It was not that he failed to form theories, and to reach seeming-wise conclusions: he could "explain" every case and "cure." Hasty generalisation, ill-considered premature result, was perhaps the most discomforting feature of the medicine of to-day, and the publication of such too often turned a comparatively harmless mistake into wide-spread error.

Dr. Bruce next tried to suggest a remedy for the various causes of his complaints. And, first, he urged the students to devote more of their time to other subjects than human anatomy,—to botany and zoology, and to physiology. Secondly, he asked them to study anatomy as a science; to advance beyond human morphology; to learn the meaning of the words *Embryology*, *Evolution*, *General Anatomy*. They must think more, even if they looked and read less, and exercise their imaginations and other intellectual powers by following the steps by which great biological inductions have been reached. And since they could not find time to do so by reading, they were advised to avail themselves of the other provision afforded them—to attend lectures and to visit the wards.

There was a great and yet growing tendency to neglect lectures, as comparatively valueless; and, for the good of English medicine, he was deeply grieved to have to say so. The advantages of the wards and of the out-patients' rooms were of the same kind; there the student, young or old, was taught and carefully directed how to think as well as to observe.

And lastly, the student should follow a more independent line of work; use his own eyes and his own head; and not ask the demonstrator to do more than direct him. He should start with the determination not to be crammed; not to be mentally wet-nursed, as if his own mother-reason had forsaken him. What was wanted in the profession were thoughtful men; and thinking capacity, rather than amount of information, should be tested at the pass examination.

ST. GEORGE'S HOSPITAL.

INTRODUCTORY ADDRESS BY DR. BLANDFORD.

AFTER welcoming the students, the lecturer said that inasmuch as his connexion with the hospital was due to a special subject, it seemed to him right to say something with regard to this subject in the present address, and to call their attention to the great group of nervous disorders, which must more and more engage the thoughts of medical men as the nervous system is more and more specialised and developed. According to the last report of the Commissioners in Lunacy, there were under restraint in the asylums and workhouses in England and Wales on the 1st January last 64,916 patients; and as 4909 were discharged recovered, and 4592 died, there must have been during the year upwards of 74,000 insane persons under restraint. This number represents the last result and outcome of the various nervous disorders—of nerve-degeneration. A vast number are incurable before admission. We cannot cure their degenerate nervous system. It is for the medical profession to do all that it can to *prevent* this degeneration. The causes of it are some of them beyond our reach as medical men, though in our social capacity we may aid in arresting them. Such are—bad food, bad air, unwholesome habitations, injurious occupations, and the total want of occupation. Other causes concern us more nearly. Much depends on the health of the mother, especially during pregnancy. A great demand made upon the nervous energy of a woman who has a child *in utero* must affect the child. Idiocy is popularly, and rightly, often ascribed to fright; and not only a sudden shock or fright, but a long-continued strain, may affect the offspring. Women who combine the bearing of children with the anxieties and responsibilities of callings which are, as a rule, undertaken by men, are likely to see the effects in their children. Another fertile cause of nerve-degeneration is intemperance—chiefly, though not exclusively, alcoholic. Although it is not now the fashion to drink in public as our forefathers did, it is a fact that there is a large amount of secret drinking, not only among men, but also among ladies; while the habits of drinking among the lower classes have probably increased owing to the higher rate of wages. It is sometimes said that the medical profession encourage and promote habits of drinking by the administration of stimulants. This charge is often made rashly and recklessly, but it behoves us to be careful how we order stimulants to nervous, hysterical, or hypochondriacal persons. And we should discourage in every way the habit of resorting to drams, pick-me-ups, or such stimulants as opium and chloral. The great source, however, of nerve-degeneration is inherited taint, not merely idiocy and insanity, but epilepsy, neuralgia, chorea, and hysteria may be the result of transmitted nerve-disorder. There are various sources of this disorder which are unavoidable, but men and women can help marrying when they have had attacks of insanity, or when their families are tainted through and through with the disease. It is for the medical man to oppose the marriage of such people, at any rate not to sanction it. Where he may not consider himself justified in absolutely forbidding the marriage of a nervous person, he should advise that he should not marry another like himself—above all that he should not marry a relation. There is a popular notion that matrimony is good for nervous people, especially girls. This is erroneous; the supposed good being counterbalanced by much evil. The longer we study mankind, the more we shall appreciate the influence of an inherited organisation, whether for good or evil, and we ought to do all we can to arrest the spread of unhealthy organisms. Looking at the outcome of all this nerve-degeneration, we see it in idiots of all degrees, in the precocity of the weak-minded, and in the insanity of boys and girls who become insane without cause at an early age. We see it in many people who, without becoming actually insane, are peculiar and eccentric, and imitate at a distance the various forms of insanity, some being sanguine and speculative, others gloomy and depressed, others suspicious and irritable. Then there are the hysterical, and those who suffer from what Sir J. Paget calls *neuro-mimesis*, or nervous mimicry, imitating both medical and surgical complaints. Another class are the hypochondriacs, the prey of quacks. Their disorder

is only a form of melancholia. Neuralgia is also a form of nerve-degeneration, and is due to defect of nerve-power. Another variety is epilepsy. Last of all is insanity. The study of this is not now a metaphysical investigation into the nature of mind, but a study of brain-disorder, one which opens a wide field for the student, whether he elects to take up the chemistry, the anatomy, or the physiology of this organ.

KING'S COLLEGE.

INTRODUCTORY LECTURE BY DR. E. B. BAXTER.

AFTER referring to the changes that had taken place in the teaching staff during the past year, the lecturer insisted on the necessity of every student striving to an attainment of the "scientific mind" rather than wasting his energies on the acquisition of a number of subjects and details, which would be soon forgotten in his practical career. The necessary qualities of a scientific mind, and the phases through which scientific truths passed, were then pointed out. Observation, hypothesis, and confirmation or verification were the three great stages in the process which every established scientific discovery had undergone, and things which could not be subjected to such an ordeal were not within the domain of true science. The explanation that insanity was due to demoniacal possession might or might not be true, as it afforded a sufficient explanation of the phenomena, if the premises were granted, but inasmuch as this could not be verified, its investigation was beyond the domain of scientific inquiry. The first essential in the attainment of a scientific mind was the possession of the faculty of wonder or curiosity, for without this the power of observation was practically non-existent. The second necessity was the power of imagination, by which the underlying concordance amongst phenomena, seemingly at absolute variance, was seized on and brought into prominence. For the proper discrimination between conflicting theories the observer must carefully select "crucial instances," and it was in so doing that education exerted its greatest influence. As in scientific discoveries, so in clinical medicine, these same talents were brought to bear; for in every difficult case the physician first observed the symptoms, then framed an hypothesis as to the nature of the illness, and afterwards verified his diagnosis by the result of his treatment or the progress of the affection. After mentioning the ill effects of many scientific cram-books (written by men with only a superficial, and therefore inaccurate, knowledge of the subject), which were calculated to frustrate rather than foster the acquisition of the true scientific method, Dr. Baxter brought his address to a close with some very strong remarks on the evil tendencies of modern competitions, as distinguished from pass-examinations, in the pursuit of a knowledge of medicine.

LONDON HOSPITAL.

INTRODUCTORY ADDRESS BY DR. ANDREW CLARK.

THE address by Dr. Andrew Clark fell naturally into three divisions. In the first he narrated the history of the hospital and its college; in the second he gave a general description of the science of medicine, and set forth its relations to other forms of knowledge, the difficulties met with in its cultivation, and the methods to be pursued in its advancement; and in the third he delivered to the students practical directions for the pursuit of their studies, and portrayed to them the character and functions of that spirit which should be the chief outcome of their training and the ruling influence of their lives.

After dwelling upon the ground covered by medicine in its relations to the individual, to society, and to the State, Dr. A. Clark proceeded to say: "But medicine not only involves vast interests—it establishes, and for its existence it must maintain, and for its progress it must continue to multiply, the most intimate relations with every other form of knowledge. There is none into which it does not lead us, none with which it does not necessitate some degree of acquaintance, none which does not lend it aid. Nor is the entire domain of the physical sciences sufficient for its needs and purposes. With the facts of the mental and of the moral worlds it seeks as close and holds as necessary a relationship. And thus throughout the whole realm of nature medicine lays down its lines of inquiry and establishes its channels of communication. It is the metropolis of the world of knowledge, and we are the privileged denizens thereof. Here we are brought face to face with the mysteries of nature, of life, of man, and of the Eternal which enfolds them. Here, in the light collected from every lamp of science and converged into a focus upon them, we may discuss the loftiest problems which can engage the mind of man. And here, in the seeking after truth and in the doing of good, we may open for ourselves sources of interest and of happiness greater and more enduring than any other that the world can supply."

But the subject of greatest general interest in this address was the speaker's treatment of experimental inquiry as a necessary and, for the present, the chief means of advancing both the science and the art of medicine. Enumerating the functions of experiment, and showing the necessity of checking its results by clinical observation, he adverted to the suffering inflicted upon animals, and the responsibilities which it imposed upon experimenters. Touching upon recent legislation and its probable effects upon education and science, he expressed his alarm at the prospect of a fresh crusade, in which "no quarter was to be given and no peace concluded" until the liberty of experimenting upon animals was unconditionally extinguished. "It is hard to understand the reasons of such a passionate antagonism, and still harder to believe that it has no other foundation than the desire to protect inferior animals from unnecessary suffering. For if this be so, why do our antagonists confine their warfare within such narrow limits? The infliction of suffering for ulterior ends everywhere visible in nature, now adjusting the balance of nations or settling the autonomies of peoples, pervades the whole structure and relations of civilised life. What are all the sufferings inflicted by all the vivisectionists of all the world compared with the hecatombs of suffering which political experimenters have inflicted upon mankind in their attempts to settle the question of the balance of power in Europe? Are the sufferings of men of less account than the sufferings of brutes, or is their blood less precious? Are the countless woes of countless human hearts to be reckoned as dust in the balance against the wounds of guinea-pigs and frogs? Why is it then that the assault is not co-extensive with its object? Or if it is in the plan of our adversaries to defeat their enemies in detail, why are *we* to be made the first and bitterest objects of attack? It is not from wantoness, it is not for ease or pleasure or gain that we make the subjects of our experiments to suffer. It is assuredly for the advancement of science, and it may be for the good of mankind. Surely the love of knowledge is as true a human desire as is the love of sport, and whilst the fruits of *this* die with the individual and his interests, the fruits of *that* live for ever in growing uses to the race. If this question is to be reopened it must no longer be confined within the narrow limits which our adversaries desire. But if it be otherwise, if hostilities are to be renewed on the old lines, with the old tactics, if again the freedom of experiment is to be the sole object of attack, then I trust that every member of this great profession, and every thoughtful man beyond its pale, will make the cause his own, and will offer to threatenings of fresh legislation such an united, earnest, and implacable opposition that the statute book of England shall never again be sullied by penal enactments against the just liberties of men. The highest heritage of humanity is in our own keeping. All the past and all the future conspire to make us loyal to the sacred charge, and, at whatsoever cost of whatsoever kind, we must hand down the freedom of experimental inquiry unmortgaged to future generations.

After discussing the chief subjects of study and the methods of cultivating each by reading, discussing, and doing, Dr. Andrew Clark concluded as follows:—"And now for the gaining of the knowledge necessary to the earliest exercise of your art, and for the training of the hand, and the judgment to use that knowledge aright, you will have here, as I have said, abundant opportunities and skilful guidance. But neither these nor any conceivable external aid will suffice, without your own co-operation in the work, and just in proportion

to the share which you take in it will be the worth and the endurance of your future success. And this necessity for self-education need cause you no discouragement; for although in carrying it on you must meet with many difficulties, you will find none which may not be overcome without greater effort than is just necessary to increase your strength for fresh encounters. Your hindrances will become thus your helpers. Special gifts are not essential to your progress. Nor will the issues of your endeavours turn upon robust health or superior abilities, or exceptional opportunities, or powerful interest, or a favouring fortune. Doubtless, these are precious advantages. But, without them—nay, in despite of the reverse of them—there is in every one of you a somewhat which, if you choose to cultivate it, will more than compensate for almost every disadvantage, and will bend the most adverse circumstances to your uses. But it is now that this somewhat is to be cultivated; it is now only in the pliability, the plasticity, and the passion of youth, that you can practise the discipline and form the habits essential to its development and preservation. This is the discipline of self-denial, the sacrifice of the lower nature. Every idle moment which you redeem, every weak indulgence which you refuse, every evil habit which you conquer, every disturbing temptation which you resist, will form a step in that sacred stair which alone conducts you to the highest life. And as you mount thereon over your slain desires, a nobler prospect will meet your view, a higher enjoyment will fill your hearts, larger ends will come within your reach, a greater power will nerve your arm. And thus it comes to be that by loving interest in your work, and by patient diligence in following it—by observing, handling, asking, contending—by taking at second-hand no knowledge which you can get at the fountain-head, by the thinking out of things for yourselves, by submitting to no ignorance which books or teachers can remove, by knowing no shame in asking or being informed, by recourse to physical amusements as a necessary relaxation and not as an engrossing occupation, by making the best rather than the worst of the circumstances in which you are placed, by a just deference to authority in matters which must be accepted on the testimony of experience, by independence tempered with humility, and by resolution tempered with caution, there is no knowledge which you may not acquire, there are no methods which you may not master, there is no professional position which you may not achieve.

"Yet one thing more. I am now old enough to claim the privilege of reminding you before we separate that professional knowledge and practical dexterity, the habits of observation and the faculty of judgment, are not the sole objects of the highest education. Unquestionably they are indispensable. But more than half their value will be lost if you miss the influence which your studies ought to exercise in developing that spirit of sacrifice, sincerity, and faith, which should rule your ways and works in life, and be the lustre of all your days—that spirit which will keep you at all times loyal to your work, even at the cost of recompense, of comfort, or of health, which will prevent you from covering with the cloak of professional sanction the weak indulgences or vicious habits of your patients; which will enable you to resist the sacrifice of your convictions to the tyranny of dominant opinion, or the seduction of popularity, which, keeping you conscious of your own infirmities and errors, will make you candid and generous to the infirmities and errors of your professional brethren; which will teach you to 'admire without envy,' and to suffer without bitterness; and which, lifting you above the highest region of human interests and passions, and showing you how human freedom, like a 'swimmer shaping his course in the stream which carries him along,' is but a limited activity in the hands of overruling power, will place you in filial relations to the Eternal Mind.

"This is the spirit which you should strive to cultivate in yourselves as one of the most precious results of the knowledge which you will acquire, and of the discipline which you will practise within these walls. This is the spirit which will redeem you from failure, and be your sure support in every time of trouble. Wealth may fail, friends may fail, you yourselves may fail, but this spirit living and fructifying in you will never fail. In the hurry, the turmoil, and the conflicts of life, in fears that might dismay, and amid calamities that might overwhelm, it will abide with you, and it will fill your hearts with 'the peace which passeth understanding'—'the peace which the world cannot give.'"

ST. MARY'S HOSPITAL.

INTRODUCTORY LECTURE BY DR. WILTSHIRE.

DR. WILTSHIRE, after having expressed the pleasure he felt that the public part of the work of his life was carried on amidst friends, whose uniform kindness encouraged and stimulated him, referred to the loss they had sustained in the death of Dr. Sibson and Mr. Gascoyen, and to whose memory he paid a well-merited tribute of respect. Turning to the object of their meeting, he stated that the work of medical education was of a solemn character, and that rightly to appreciate the value of medical studies it was necessary to understand what were the aims and objects of medicine, and the relation it bore to other callings. It was only by judicious comparison that the true proportion of things could be estimated, and it was the want of, or neglect to use, the comparative faculty that brought so much trouble on communities and on individuals. Their first aim and paramount duty was to *prevent* disease, and, failing that, to *cure* or relieve it. The two great branches of medicine were, then, preventive medicine (hygiene) and curative medicine. In the former the relations of the profession, as a body, were with the State; in the latter they were with individuals, and were personal. In both departments the profession had done much. In public health they had been the pioneers, and almost the sole workers, though they were the only losers by promoting healthiness. Great triumphs undoubtedly awaited them in the noble field of sanitary science.

In curative medicine, while the future was also great, they were able to point to past achievements with pride and satisfaction. The progress their professional knowledge was making every year was immense, and had been especially great during recent times. He lamented that the benevolent work of the profession had been so gravely misrepresented, and science hindered by recent agitation respecting vivisection; and he demonstrated the injustice of the accusations brought against the profession as a body, no doubt in ignorance, by many whose generous sympathies had been misled. He claimed for the members of his own calling no less tenderness of feeling than other persons possessed, with which was coupled a greater knowledge of, and at least equal sympathy with, human suffering, which was in amount stupendous, and in character awful.

Dr. Wiltshire next pointed out how great an influence on the welfare of mankind, especially town-dwellers, the preventive branch of medicine was capable of exercising. In its fullest development it was capable of making mankind healthier in body and in mind. The tendency to sin, vice, and crime, might therefore be diminished by attacking it at its inception; for the hereditariness of moral defects was as abundantly clear as the inheritance of proclivities to physical disease. What each one of us was, morally and physically, was very much the product of ages. Still, we were powerfully influenced by our environments, and being thus susceptible it behoved each generation to pay great attention to all that affected our mental and physical well-being, so that as clean a bill of moral and physical health as possible might be handed down to posterity. Lord Beaconsfield's celebrated paraphrase "sanitas sanitatum omnia sanitas" embodied objects which in future years must become the care of statesmen; for a healthy and vigorous population formed the most valuable wealth of the State. The curative branch of medicine, which engaged the energies of the bulk of the profession, afforded scope for the exercise of the noblest qualities; and to stand by the bedside of the sick and sorrowing, not idly but helpfully, both able and willing to relieve, was as great a privilege as it was an abiding pleasure. The study of medicine and the many sciences that were ancillary thereto, greatly illuminated the mind. They exerted a corrective influence on the judgment, and enabled us to survey and contemplate life and its environments from a lofty sphere. Above all, they engendered a love of truth, and that for its own sake. Dr. Wiltshire believed there was a noble future in store for medicine. This had been recognised by a dis-

tinguished statesman, Mr. Gladstone, in his recent address to the students of the London Hospital. In the future certain municipal laws would have to be ordained in accordance with the teachings of science. The Mosaic code had done much for the Jews, and similar hygienic laws, expanded and corrected by the light of science, might, under divine guidance, still do much to promote the healthiness of all the nations of the earth. Illustrations of the importance to society of both the preventive and curative branches of medicine—which in practice were closely interwoven—were given.

Dr. Wiltshire then addressed words of welcome to the freshmen, of exhortation to the advanced students, and of counsel to those who were about to embark in practice. He entreated all of them to work earnestly and honestly, to observe carefully and closely, and to reflect upon their observations, to leave nothing undone in order to become masters of their calling; and lastly, remembering the dignity, the responsibility, and the sacredness of their profession, to practise it only as high-minded and honourable gentlemen, taking care that its fair fame was not sullied in their keeping, and that they did not pursue it in a mercenary spirit.

MIDDLESEX HOSPITAL.

INAUGURAL ADDRESS BY DR. G. H. EVANS.

AFTER a few preliminary remarks Dr. Evans commenced by comparing the career of the medical student to that of a traveller along a road, straight at first, and easily followed, provided along its course with establishments where travellers would be furnished with merchandise of various kinds, and with instructions how best to dispose of it. This portion of the road ended in turnstiles where tolls had to be paid, which gave admission to an open country with roads more or less plainly indicated, leading in various directions, from which roads the traveller might choose that which seemed most likely to lead him to a good market for his wares. After a few words on the subject of the selection of the ultimate road, he proceeded to give some advice as to the conduct of the students during the course thus described, laying great stress on the necessity during their hospital education for taking every opportunity of doing practical work. "There is," he said, "not one of the subjects with which you have to make yourselves acquainted which can be learnt only from books and lectures; but you must, in the case of every one of them, familiarise yourselves with the practical application of the principles laid down in books and lectures: and, remember, that in the exercise of your profession you will have to treat individuals, not diseases; that in no case which you may be called upon to attend will you find a cut and dried method, or a hard and fast rule of treatment available. You will have to exercise your own judgment on each individual case, and you will be guided by the knowledge and experience which you will have acquired of your profession and of your fellow men." He then made some observations on the alleged inferiority in social status of the medical as compared with other professions. Where this opinion existed it was probably due to unfair comparisons between individual members of different professions, though there were instances of a kind of deterioration in some cases, where want of means, want of opportunity of mixing in good society, and other causes, had combined to drag a medical man in general practice in a provincial town down to the social level of the tradesmen who formed the majority of his clients; and, undoubtedly, the unwillingness of the public to appreciate properly and to remunerate sufficiently the services of medical men had had a good deal to do with the difficulty experienced by some members of the profession in keeping themselves clear of some of the lowering influences to which he had alluded. As a proof that his profession had not really to any extent deteriorated, he referred to the number of its members who were working unselfishly and honestly, with very little substantial reward; believing that there is no profession in which so much unpaid good work is done by men who can ill afford to give their hard-gained experience for no return but the satisfaction of knowing that they are benefiting their fellow creatures. After referring to the necessity for more general education and culture among medical men, he said: "Always bear in mind that you have to keep up your own reputation and that of the noble profession to which you belong; treat every one with whom you come in contact with the courtesy and kindness with which you would like to be treated yourself; and, even supposing that you do not meet with much substantial reward, you will yet have the satisfaction of feeling that you have done your duty fearlessly, honestly, and unselfishly."

ST. THOMAS'S HOSPITAL.

INAUGURAL ADDRESS BY MR. FRANCIS MASON.

THE lecturer commenced by referring to the curious coincidence that he happened to be the only surgeon who had been selected this year to address the students at the commencement of their hospital career. He was unwilling to draw any invidious comparison between the work done at this and at other hospitals, when there was so much evidence that all were working so nobly for the general good of mankind; but in reflecting on the antiquity of the hospital, and in contemplating the names of the many eminent physicians and surgeons who in former years laboured so gloriously in its suit and service, he had no difficulty in finding a suitable theme for consideration. He then gave a brief but, nevertheless, a very interesting, account of the rise and progress of the hospital. It was one of the Royal hospitals, and was established as an almshouse in the eleventh century, on the site of the present Charing-cross Railway at London-bridge. He then referred to the fact that the distinguished anatomist and barber-surgeon, Cheselden, was a pupil and afterwards was appointed surgeon to the hospital in 1719. Alluding to Cheselden as a barber-surgeon, he stated that in the eleventh century medicine was entirely in the hands of the clergy; for example, William the Conqueror was attended by a bishop and an abbot, and the surgeons to King Henry VI. were barbers and his physicians priests. The barbers were, indeed, originally introduced to surgery by the priests, whose heads they shaved. He then referred to the relic of the barber-surgeon as seen at the present day, in the pole which is observed outside the hair-dressers' shops where they profess "easy shaving." The pole represents the staff which the patient grasped in order to accelerate the flow of blood in the operation of venesection. The stripes, red and blue, which decorate it, are symbols of the venous and the arterial blood, and the white line indicates the bandage that was applied to arrest the hæmorrhage. He then spoke of the Act of Parliament passed in 1714, by which the barbers and surgeons became two distinct corporations. On the separation, the barbers retained the old Hall, books, paintings, and records, and thus the surgeons were left homeless and without property. They even had to borrow money to build a hall in the Old Bailey, on the site of the present Sessions House, and subsequently they removed to their present abode in Lincoln's-inn-fields. Referring to Cheselden, Mr. Mason stated that the celebrated John Hunter was one of Cheselden's pupils, and that Dr. Edward Jenner's grand discovery of vaccination was first performed in London, by Mr. Cline, senior, at St. Thomas's Hospital, in 1798. Mr. Mason then referred to other illustrious men who had been connected with the hospital, including the names of Dr. Richard Mead, Sir Astley Cooper, Dr. Mark Akenside, the poet, the renowned Dr. John Lettsom, and others, men who have proved themselves benefactors to science and mankind, and whose self-reliance, industry, and perseverance all might well emulate. Both Mead and Cheselden, said the lecturer, attended Sir Isaac Newton, and "won golden opinions of all sorts of people," but by none were their talents more appreciated than by Pope, the poet, who referred to them in the following complimentary terms:—

> "Weak though I am in limb, and short of sight,
> Far from a lynx, and not a giant quite,
> I'd do what Mead and Cheselden advise,
> To save these limbs and to preserve these eyes."

Addressing himself then more especially to the pupils who were commencing their studies, he reminded them that the student should at once be imbued with the all-prevailing truth, that there is no royal road either to learning or to success in the medical profession. Money might assist to a certain extent, but it was of little value to further the pro-

gress of science without the closest application and persevering and sustained industry. Work was all-important in every calling. "We listen," he said, "with rapt attention to the learned divine. We marvel at the brilliant oratory of the illustrious statesman. We gaze in wonderment on an historical picture, in which all the details, with appropriate costumes, are depicted by the artist with the utmost accuracy and precision. We admire the actor, who 'holds, as 'twere, the mirror up to nature,' and places before us the characters of England's mighty dramatist with vigour and truthfulness, representing the 'very age and body of the time.' But such conquests were not won, such triumphs were not achieved, without incessant labour and unflinching perseverance."

The lecturer then referred to the labours of John Hunter, of Michael Faraday, and of Harvey, the discoverer of the circulation, and impressed upon his hearers the importance of being self-reliant, and of being accurate in their work. Truthfulness and good principle, purity of motives, and prompt decision, were imperatively demanded for success in any walk in life. Great wealth and high honours, although open to all, were, he said, practically given to few in our profession; yet he expressed his own honest opinion that there was no calling in which a fair competence is so speedily acquired as in the medical profession.

"Let me add, in conclusion," said Mr. Mason, with much earnestness, "to all who are now studying here, that whether your life be a success or a failure, I confidently hope you will never lose sight of the moral influence and discipline inculcated at this hospital. In life's campaign you will necessarily meet with many vicissitudes to impede your progress, and you will have to contend with and conquer numberless difficulties; yet when the fiery fight is o'er, and you bear away the emblem of your victory, you will, I feel sure, look back in your leisure moments with pride, reverence, and thankfulness to your Alma Mater, gratefully remembering the happy days you have spent here, and recognising with intense satisfaction the many lifelong friendships that you have had the opportunity of forming."

WESTMINSTER HOSPITAL.

INTRODUCTORY ADDRESS BY DR. W. H. ALLCHIN.

COMMENCING with a plea for the custom of inaugurating the opening of the medical school with an address, the lecturer proceeded to state that in his opinion such a custom was productive of actual good. Admitting that to advanced students, and to those who entered on the study of medicine after a previous university career, the words of welcome and advice, of which the annual orations usually consist, might be useless, he contended that to the first year's man such words were often a silent encouragement, and came to him at a time when such encouragement was especially valuable. By the custom of an annual gathering the links between old students and their school were maintained with advantage to both. Since within the last few years there had arisen numerous questions, in which the profession and the public alike were interested, such as vivisection, the medical education of women, and sanitary science, opportunities were needed for the profession to state their opinions, and the lecturer considered that such an occasion as the present was a perfectly fit and proper one for the purpose, especially since the public had come to look for some such utterances at this time.

The actual subject-matter of the address was the characters of the science and art of medicine as a marketable commodity, the qualifications of those who practise it, and the position of the public in regard to it.

The science and art of medicine, resting upon a number of other sciences, each of which is in an incomplete though progressing condition, is essentially at present an inexact science. Though there is every reason to hope that in time this condition may be changed, this very uncertainty imposes on the practiser of the art grave responsibilities. For since it would seem that in proportion to the incompleteness of an art, the more does it rely upon the natural capabilities of its exponent, it becomes imperative that the doctor should be of the very best quality, and that a second-rate practitioner should be unheard of, considering the importance of the issues in his hands. This very uncertainty, also, which makes the medical profession so different from any other which practically concerns the community, is the cause of those frequent differences of opinion betwixt doctors so injurious to us in the public eye. Because of this uncertainty the quack is a possibility amongst us. Trading on the weak points of our science and the credulity of his victims he may accomplish a cure, since he frequently uses the same remedies as we do ourselves; but between his principles and his means there is absolute want of connexion, and a total absence of rational system.

The attitude of the public at large in respect to the healing art is one of sheer ignorance and misconception of its nature, together with an almost blind confidence in the practisers of it. Pointing out that this ignorance is unavoidable rather than culpable, and is on the whole advantageous to the patient, the lecturer dwelt with considerable emphasis on the necessity that this combined ignorance and confidence should not be abused through unpardonable ignorance on the part of the practitioner. Having, then, shown that on all grounds, the nature of the art, and the credulity and trust of those on whom it is practised, the doctor should be of the very best possible quality, the lecturer went on to consider how far the doctor is equal to the demands that are made upon him. Without doubt the medical man is very much what the public make him, though at the same time the public are not altogether indisposed to take him at his own valuation. Since the profession offers an honourable social position, and a means of livelihood, many enter it without due regard to their possession, or want, of natural fitness for it, and in that way many are numbered in our ranks who would be better suited elsewhere. Passing on to consider whether the present system of medical education was the best adapted to produce the best men, the lecturer had no hesitation in saying that it is marked by several faults of the gravest nature, foremost among which is the far too short time that is imposed on the student for the systematic and theoretical portion of his profession. On comparing the regulations for the diploma of M.R.C.S. of forty years ago and to-day, it is found that less rather than more time is required now than then, and this in face of the fact that the subjects have doubled or trebled in extent, and that many new ones have been added. After making all allowances for improved means of education at the present day, and the higher standard of preliminary training on the part of the student, the lecturer still considered the period of study to be far too short. Among the most prominent evils that such a system engenders is the high-pressure, imperfect work called "cramming," with its attendant train of "coaches," and "cram-books"; and the tendency that it has to make the practical work of the student empirical for want of a sufficient foundation of theoretical knowledge to guide him. The examinations for diplomas, besides determining to a very great extent the period of study, have certain inherent defects, especially their multiplicity, and their almost total disregard of the actual education of the student. As regards the course of study itself, the lecturer advocated the introduction of a course of biology, to harmonise and connect the various other courses of lectures, which to the beginner appear as so many isolated and separate subjects; to such a course the term Institutes of Medicine might be applied.

In conclusion, the lecturer bid welcome to the fresh men, for whom he said there is plenty of room.

A CASE OF URTICARIA BULLOSA.

BY DYCE DUCKWORTH, M.D., F.R.C.P.,

ASSISTANT-PHYSICIAN TO ST. BARTHOLOMEW'S HOSPITAL; EXAMINER IN PRACTICE OF PHYSIC IN THE UNIVERSITY OF EDINBURGH.

THE following case presented features of interest sufficient to warrant its publication, and the particulars of it are as follows:—

On July 18th E. H——, aged thirty-three, the wife of an artisan, and mother of six children, came as an out-patient to the hospital. She was a dark-haired, fresh-complexioned woman, of slender build, and had always enjoyed good health.

On the 11th inst. she went with her husband and baby to Sheerness for a week's holiday. She stated that on the 12th her face became puffed over the right cheek, and an itching lump formed there. On the 13th lumps appeared on her right arm, and next day on the left arm. These were red in colour, and itched. On the 15th "heads" were seen upon these lumps. She could not in any away account for the disorder. The weather was very hot, but her arms were not exposed to the sun, and she did not bathe in the sea. On the 17th the family returned to London.

The following day there were to be seen four distinct bullæ about the right olecranon, some having burst and given exit to a clear gummy serum. There was one wheal, not vesicular, situated also near the olecranon. Over the right wrist a large wheal, the size of half a walnut, was found, which was red and itched, and on the flexor surface of the wrist over the ulnar half there was another less raised but pomphous patch. On the left arm were four bullæ, the size of marbles, about the elbow, and others three or four inches below that point, all having burst from injury. Some small red pomphous patches were also seen above the elbow. There was some puffiness on the back of the left hand. The face and hands were sunburnt, but not the arms. No bullæ or wheals were found in any other part. The tongue was flabby and thinly furred, appetite not good, bowels open daily. The patient complained of a fluttering sensation at the precordia, and had done so for a week previously. Cardiac sounds natural. Catamenia regular. The urine had been thick of late. She drank usually a pint of beer daily, and had some gin in addition during her holiday.

On inquiry I discovered that on the 12th inst. the patient and her husband ate a tinful of American preserved lobster, and the baby likewise partook of this delicacy. Neither husband nor infant, however, had any untoward symptoms.

The cause and the nature of the disorder were thus made quite plain. I could have no doubt that the case was one of bullous urticaria. The first impression that naturally occurred was that the patient was suffering from pemphigus, but careful examination showed that neither on etiological nor on pathological grounds could it be thus regarded.

Bullous urticaria is described in books on cutaneous medicine, but I imagine that it is a very rare disorder; indeed I do not remember to have seen a single instance of it during my four years' term of service in the skin department of the hospital.

In the presence of all the symptoms, and notwithstanding the long period that had elapsed since the disturbing element of diet was introduced, I prescribed half a drachm of powdered ipecacuanha as an emetic. Mr. Wood, the late apothecary to the hospital, used to treat all cases of severe urticaria in this way, and with good results. Five grains of calomel-and-colocynth pill were ordered over night, and a draught with bicarbonate of soda and diluted hydrocyanic acid out of infusion of calumba was prescribed thrice daily. Each bulla and patch was painted thickly with flexile collodion, the larger ones being evacuated in the first instance by my colleague, Mr. Langton. Unfortunately the patient never returned to enable me to record the further progress of the case.

It is, perhaps, remarkable that a vesicular stage is not more frequently reached in severe cases of urticaria. In this particular instance I can offer no explanation of its occurrence. It did not appear that the patient was liable to attacks of nettlerash. That there was nothing especially virulent in the lobster she ate is proved by the absence of any symptoms in her husband and infant, who also partook of it. But in her case, the ordinary effusive state constituting a wheal was so far surpassed that free vesiculation took place. The serum which was let out from the entire vesicles was quite clear, and in no degree puriform in appearance. It is noteworthy that the affection was tolerably symmetrical, and, with the exception of the right cheek, was confined to the upper extremities. The suffering during the week had evidently been very considerable, and of a much more severe character than is common even in smart cases of urticaria.

Grafton-street, W.

ON THE USE OF THE ASPIRATOR.

BY J. E. M. FINCH, M.A., M.B.,
MEDICAL SUPERINTENDENT, LEICESTER BOROUGH ASYLUM.

I AM desirous of giving publicity to the following case, as illustrative of the valuable aid of the aspirator in the treatment of disease.

Miss M. O——, aged forty-two, the chief nurse of this asylum, was, on Wednesday, April 19th, suddenly seized with intense pain in the abdomen, followed by vomiting. The patient had for some months suffered from indigestion, attended by constipation, but was about her ordinary duties up to the time of the attack. The pain was so agonising that, though by no means of an hysterical temperament, she could not refrain from screaming. She says it commenced on either side of the umbilicus, and seemed as if her inside was being drawn out. This was followed in a few minutes by a feeling of something giving way in her inside, and then the pain became easier. After about a quarter of an hour, while being assisted to bed, the pain returned as severely as before. On my seeing her shortly after she was lying upon her back with her knees drawn up, and vomiting frequently. Her countenance was extremely anxious, and her skin cold and clammy. The pain had abated, but there was great tenderness of the abdomen, with tympanites. The bowels had acted slightly a few hours before the attack. Her pulse was 120, small, feeble, and irregular. The patient appeared to be in a state of collapse, and said she thought she was dying. I prescribed warm linseed and mustard poultices over the abdomen, ten-minim doses of solution of hydrochlorate of morphia, and small quantities of iced brandy-and-water.

April 20th.—The objective symptoms remained unaltered, but she expressed herself as feeling somewhat better. The same treatment was continued.

21st.—Passed a restless night, and the symptoms were not so favourable, the abdomen being much more tense. A soap-and-water injection was given in the morning, and again in the afternoon, but did not afford any relief on either occasion. She was then ordered small injections of beef-tea, with chloric ether and opium every three hours, and the abdomen was rubbed with camphor liniment, chloroform, and opium.

22nd.—The patient passed another restless night, and had frequent attacks of severe vomiting. The abdomen was now so distended as to seriously impede the heart's action. The pulse was 130, small, feeble, and very irregular. At the suggestion of Dr. Pearce, of Leicester, who was attending the case in consultation with me, it was decided to use the aspirator. Accordingly, the smallest needle belonging to it was inserted half-way between the pubes and umbilicus, and a large quantity of flatus withdrawn. This was immediately followed by great relief of the tension, and the pulse dropped during the operation to 120, and became more regular. The patient expressed herself as feeling much easier.

23rd.—The abdomen had again become swollen, but not to so great an extent. Pulse 130, irregular. In the afternoon the bowels acted copiously, for the first time since the commencement of the attack.

24th.—The symptoms were much more unfavourable today, and the vomiting and retching most distressing. Towards evening the patient appeared to be in a moribund state. As a last resource it was resolved to again use the aspirator, and this time the needle was inserted into the cæcum. A large quantity of gas was withdrawn, together with a little feculent fluid. The relief on this occasion was not so immediate, but the patient passed a better night, and on the following morning (Tuesday) had another action of the bowels.

After this the tension of the abdomen began to decrease, and there was no need to use the aspirator again. I do not, therefore, think it necessary to give any further details beyond mentioning that the temperature, which was carefully taken night and morning, never exceeded 101·8°.

During the next two months the patient very slowly improved, and about the middle of June was well enough to go to Scarborough for change of air.

In two particulars I think the above case affords weighty

evidence in favour of the use of the aspirator. In the first place, it unquestionably relieved the tension of the abdomen, and thereby enabled the bowels to act; and, secondly, its use was not followed by any inflammatory action.

Humberstone, near Leicester.

CASE OF

HEMIPLEGIA WITH GREAT DEPRESSION OF TEMPERATURE.

By BEVAN LEWIS, L.R.C.P. Lond.,

PATHOLOGIST AND ASSISTANT MEDICAL OFFICER, WEST RIDING ASYLUM.

J. W——, aged forty-four, was admitted into this asylum suffering from a slight attack of excitement. It was stated by his friends that for the past twelve months a mental change had been perceptible. He became restless and agitated, wandering about his room at night, and refusing to go to bed. From being a quiet reserved man, he became unusually talkative. About five months ago he was admitted into the infirmary at Leeds for a serious dislocation of the left shoulder, and remained there for about three weeks, during which time it was observed that his mental powers were rapidly failing him. He has had several attacks of excitement, during which he has threatened to drown himself; but he has never made any actual suicidal attempt, although frequently expressing his wish that he were dead. Of late his memory has failed him greatly, and as it was observed to become defective he became quieter and more taciturn. He has never given evidence of delusions. He has been greatly addicted to drinking for many years. Prior to the present attack he had had no serious illness. There is no history of epilepsy or cranial injury. The family history is good, and exhibits no hereditary predisposition; his father, however, is stated to have had two apoplectic seizures prior to his death at the age of sixty.

Present mental state.—On examination it is found that he exhibits a considerable amount of dementia; his memory chiefly fails him with regard to time; when asked when he injured his shoulder, he says "Five weeks ago." He does not know where he is, gives the place another name, and shows no curiosity or interest in his surroundings. He is quite unconscious of any mental defect, and says his memory is as good as it ever was. He attributes his inability to follow his employment of late to a slight depression, and affords no clue to his possession of delusions or hallucinations. Since admission he has been quiet at nights, has slept well, and has been cleanly and orderly in his habits.

Physical examination.—Height 5 ft. 5½ in.; weight 138 lb.; head symmetrical; hair brown, turning grey; eyes grey; slight inequality of the pupils, the left being rather more dilated than the right. There is much want of expression on the right side of the face, and the mouth is drawn to the left side when he laughs. He is in fair bodily condition and is free from bruises or eruptions. The grasping power of the right hand is slightly less than that of the left; this he attributes to rheumatism. There is no dragging of the foot or any characteristic feature in his gait, but he does lean slightly to the right side. According to patient's own statement, he had a stroke three years ago, and lost the power of his right side for some weeks, but, owing to his advanced dementia, this statement is wholly unreliable. The further examination reveals nothing unusual in the condition of the circulatory, respiratory, or alimentary systems. The diagnosis of this case was of course dementia, probably associated with the presence of an old clot in the left corpus striatum.

Progress of the case.—The entries in the case-book for the ensuing two months present nothing of importance to note; but on the morning of the 25th of November patient is stated to have had a paralytic seizure. The mouth was now drawn strongly to the left side, the tongue protruded to the right, and there was much thickness of speech and difficulty in articulation. Common sensation was greatly impaired in the soles of both feet, there was much insensibility to pain, and reflex excitability very much diminished. No muscular movements ensue on sharply pricking the integument over the facial muscles of the left side. The pupils are both small, the left the smaller of the two. The respiration is slow and jerking; the pulse very weak, and 105 per minute.

Nov. 29th.—This morning his speech was much more affected, and nothing that he says can be made out. Sensibility in the soles of the feet, however, is much improved, and there is also far more reflex excitability apparent. The breathing is laboured, and 19 per minute; the pulse 80, and weak. Hands and feet extremely cold, and the temperature of the left axilla was found to be 92·6° Fahr., that of the right 92·4°. This evening the symptoms remained unaltered, but the temperature in the right axilla was 93·2°.

30th.—His general condition remains unaltered, and the temperature of right and left axillæ is 92·4° and 92·6°, respectively.

Dec. 1st.—In a semi-comatose condition. There is dulness of right side of chest posteriorly, and the breathing is heavy and slow. The reflex action of both legs remains tolerably good. Temperature in right axilla 96·6°.

2nd.—Lies on his back with his mouth wide open, and breathing very heavily, 32 per minute. The pulmonary complications have still further developed themselves. There are loud mucous râles in the trachea. He is apparently quite unconscious, and there is no reflex action on irritating the eyeball. The soles of the feet appear at times unusually sensitive to reflex excitation. The temperature in both axillæ 104·2°. This evening he is more conscious, squeezes the hand when asked to do so. The pulse 104, and regular; respiration 40. The temperature has again fallen to 95·4°.

3rd.—This morning he is apparently *in articulo mortis*; breathing rapidly (56 per minute), with loud mucous râles in the trachea. When spoken to loudly he shows some signs of consciousness. The tongue is dry and brown. Reflex excitability of feet remains normal. Pulse 120, and regular in strength and frequency; temperature in right axilla 97°.

4th.—There is total inability to expectorate the accumulating bronchial mucus, the dyspnœal symptoms are therefore exceedingly great. There is no determinable loss of power in the arms, and reflex action is still good and at times acute. He is semi-comatose, but can still be roused, and even appears to understand what is said to him. For several days past he has had five nutrient enemata administered every twenty-four hours, and brandy and milk given by the mouth. At the ten visit this evening the pulse was 132, the respiration 60, and the temperature 100·4°. At the night visit the pulse had risen to 140, the respiration was 60, and the temperature 100·4°.

He died at 3·15 A.M. on Dec. 5th. The following is an abstract of the post-mortem examination.

Sectio cadaveris, sixty hours after death. (Weather cold and frosty.)—Head: Skull of average thickness, but dense and hard, capacious and symmetrical. The dura mater is not adherent, and the sinuses contain dark clots and fluid blood. The arachnoid is neither thickened nor clouded, nor do the convolutions present any traces of wasting. The pia mater is thin, strips freely, and presents no points of attachment. The whole brain weighs 1667 grammes. The large arteries at the base are of an unusually large calibre, and studded with numerous atheromatous patches. On cutting into the brain-substance, it is found to be tolerably firm in consistence, and the grey matter is of average depth and normal colour. In the centre of the left corpus striatum there is a recent dark-red clot, of diamond shape, half an inch in length by a quarter of an inch in breadth; it lies across the corpus striatum, its long diameter being at right angles to the long diameter of that body, and at a point about midway between the anterior and posterior ends of the ganglion. Behind this clot, which is of thick, pulpy consistence, the substance of the corpus striatum is very soft and pulpy, exhibiting a brownish tinge. This softening, however, does not trench in the slightest degree upon the optic thalamus. There is also a small round dark clot, about a millimetre and a half in diameter, on the under surface of the left corpus striatum, or more exactly the caudate nucleus or intra-ventricular portion. There are no clots in the right hemisphere or the ganglia at the base on this side. It is unnecessary to enter into the details of the examination further than to remark that, of the thoracic and abdominal viscera, none showed any evidence of disease except the lungs, which were in

part congested and œdematous, and the bases involved in hypostatic pneumonia.

Remarks.—The case just recorded bears the usual features of hemiplegia from sanguineous apoplexy, followed by failure of the higher mental faculties, loss of memory, volitional control, as well as decided emotional implications; nor were any especially noteworthy or unusual symptoms presented until the apoplectic seizure occurred at the asylum. In this last attack, which was one of right hemiplegia, involving the facial muscles as well as the muscles of articulation, there was much anæsthesia and analgesia of the extremities, the left leg also participating in this condition. There was no external strabismus, but the pupils, and especially the left, were strongly contracted, whether from a paralysed condition of the sympathetic, or transmission of the irritation downwards to the locus niger in the crus, remains an open question. The *temporary* loss of reflex excitability is also very interesting. It has been affirmed by Dr. Crichton Browne that abolition of reflex action as a *permanent* result is especially connected with *destructive* lesions of the optic thalamus, and the ratio of its loss is in direct relation to the amount of destruction to which this ganglion is subject. An exceedingly interesting paper on this point, by Dr. Browne, appeared in the West Riding Asylum Reports for 1875, in which this statement is supported by several notable instances of such cerebral lesions, and the more probable explanation of these phenomena are adverted to, eliciting questions of a most important character. The author also here gives confirmation to a fact which we constantly recognise in cases of hæmorrhage into the ganglia at the base—viz., that there is an immediate *fall* of temperature on the affected side of the body. Several cases observed by myself have later on exhibited a *rise* above the normal standard, but this is readily explicable, as Dr. Browne believes, on the ground that sufficient time has elapsed to develop a zone of inflammatory softening in the neighbourhood of the clot. The fall of temperature in these cases is not, as a rule, considerable, and the extreme depression of the mercury in this case therefore constitutes a highly interesting and instructive phenomenon. Such cases as these afford the strongest presumptive evidence of the existence of a vaso-motor centre in the brain, and its close connexion with both the sensory and motor ganglia at the base; and still more impressed must we be with this view when we take into consideration the frequent alterations in vascular tonus in the paralysed limbs, the rapid and not infrequent development of pemphigus and other abnormal conditions of the nutritive apparatus of the part affected. The localisation of this vaso-motor centre is an extremely interesting physiological question, and one which has already occupied the attention of several continental authorities. I have already endeavoured to show that certain discharging lesions of the cerebrum are accompanied by marked alterations in the temperature of the body, and that these thermal disturbances do appear to be correlated with a simultaneous depression or excitation of cerebral action. The case now before us, however, presented none of the phenomena of irritation; there was really wholesale destruction, and the effects accruing coincide with what would be expected to occur in destructive lesions. In both cases, however, it appears to me, from a close study of the resultant phenomena, that the thermal disturbance is most marked when one side of the brain suffers than in lesions of the opposite hemisphere, the left hemisphere being accompanied by a far more marked result in this direction. That this disturbance in temperature would differ notably according to the hemisphere affected has been presumed by Dr. Hughlings Jackson, and mentioned by him to me some months ago, and his vast clinical experience amply justifies the importance which I would therefore attach to this opinion. Clinical experience may here, however, be usefully supplemented by experimental physiology, and the data thus obtained have always borne evidence to the truth of this theory. Destructive lesions of the ganglia of the base artificially produced in rabbits or other mammalia invariably are followed by far greater disturbances in temperature when the left hemisphere is the one operated upon—the *systemic*, as Dr. Hughlings Jackson would term it, in contradistinction to the more special or right hemisphere. We possess means of modifying greatly the cerebral circulation through removal or irritation of the superior cervical ganglia of the sympathetic. Thus, when both ganglia are subjected to a strong induced current from a Stöhrer's battery, great care being taken to thoroughly insulate the wires used, it will be observed that the temperature falls, and if a permanent irritation is induced, and a calorimetrical observation taken, it will be found that there is a most marked arrest of heat formation, the amount communicated to the calorimeter being from five to ten times less than in rabbits in a normal condition, whilst at the same time the temperature of the body is falling. Thus, in a rabbit operated upon in this way some months ago, it was observed that the total amount of heat communicated to the calorimeter was only ·490 gramme-unit of heat for each gramme of body-weight in half an hour, the temperature of the body at the same time falling. In the normal state the amount appears to be fully an average of 5·5 gramme-units per hour for each gramme of body-weight; and thus, by modifying the amount of blood to the head and neck, the actual amount of heat generated was lessened by five or six times. I mention this fact as merely illustrative of the rapid and powerful influences that can be brought to bear upon the temperature of the body through the vaso-motor system of nerves. Not alone may the ganglionic centres of the cerebrum thus influence the vaso-motor centre by direct injury to themselves, but the effect of section or irritation of the sensory or motor strands of the cord communicated upwards to them will have a like result. Thus, in the operation for the artificial production of glycosuria, when experimenting upon the effects of codeia, I found that when the sensory strands were divided by the wings of the stylet an immediate fall of temperature occurred; and the calorimeter gave as a result frequently as much as 13·4 gramme-units of heat for each gramme of body-weight per hour—an enormous amount when contrasted with the normal state. Numerous calorimetrical observations have lately been made by myself with the view of elucidating this question, and which I intend shortly to publish. The results tend to confirm the opinion that I have here alluded to—namely, the intimate relationship between the ganglia at the base and an intracranial vaso-motor centre and the predominance of thermal disturbances in lesions of the left hemisphere. The subsequent rise of temperature towards the termination of this case was undoubtedly due to the pulmonary complications which then supervened.

Wakefield.

A Mirror
OF
HOSPITAL PRACTICE,
BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum, tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

UNIVERSITY COLLEGE HOSPITAL.

CHRONIC URETHRAL STRICTURE; TRAUMATIC INJURY OF PERINEUM; SUBSEQUENT RUPTURE OF URETHRA AND EXTRAVASATION OF URINE; DEATH; REMARKS.

(Under the care of Mr. BERKELEY HILL.)

THE following notes, for which we are indebted to Mr. A. P. Gould, surgical registrar, should be read in conjunction with those of the case recorded at page 187.

D. H——, aged forty, a showman, was admitted on Jan. 15th in a drowsy apathetic state, and of a sallow and anxious countenance. A puffy, livid-red swelling extended from the perineum along the scrotum and penis, nearly up to the umbilicus; a red blush also extended down the upper half of the thighs. The left side of the scrotum was purple with ecchymosis, and the patient was unable to pass water. Tongue dry and brown; pulse 140, small and weak. The history he gave was as follows. On the evening of Jan. 12th, when getting down from the box seat of a brougham, he slipped, and fell with his legs astride the wheel, striking

the scrotum and perineum. He went home and fomented the part, and next morning he passed a catheter, having been accustomed to do so once a fortnight, and drew off urine. On the morning of Jan. 14th he was, however, unable to pass his urine, and on making a sudden effort he felt something give way, and immediately afterwards he felt severe pain in the perineum. From that time he did not pass any urine per urethram. The scrotum soon began to swell, and he was in great pain all day; at night a little urine oozed from a wound he had received in the perineum, and he felt relieved. On the morning of the 15th (date of admission) redness was noticed extending up the abdomen and down the thighs, and the patient became drowsy; he was then brought to the hospital.

The man had had a stricture for the last sixteen years, and for some time he had used a No. 5 catheter. He formerly indulged much in alcoholic drink, and was of exhausted constitution.

Four incisions were at once made into the scrotum and into the perineum. Ether was then administered, and a No. 8 silver catheter passed down the urethra until it stopped at five inches from the meatus. The end of the catheter could then be felt bare through the wound in the perineum. Mr. Hill then passed a fine director from the perineum along the urethra into the bladder, and with a bistoury cut forwards on to the end of the catheter, which was then passed on into the bladder, and more than a pint of bloody urine drawn off. The catheter was tied in and allowed to drain through a tube attached. Oakum poultices were applied to the scrotum, and an ounce and a half of brandy with half a drachm of tincture of opium were given at once. Ordered an ounce and a half of brandy every three hours, and liquid nourishment. During the night a large quantity of offensive bloody urine escaped through the catheter. On Jan. 16th no urine passed for some hours, but then flowed freely again, and the catheter was removed. Abdomen tympanitic. Ordered brandy every two hours, and beef-tea, milk, and jelly to be taken freely.

On Jan. 17th the redness and swelling over the abdomen and thighs were considerably less; the cellular tissue over the left side of the pubes was evidently sloughing; all the skin of the scrotum between the incisions had sloughed, the slough being as large as the palm of the hand, and quite black; all the urine came through the wound in the perineum; tongue dry and brown; pulse 124, small, jerky; skin cool, moist; temperature 99·4°.

On the 18th three small incisions were made above the pubes.

On the 20th the patient complained of being very drowsy and thirsty; tongue cleaning. Temperature 99°; pulse 120, full, compressible; great tenderness above pubes; redness receding; slough on scrotum separating. At 3 P.M. he had an enema, which returned bringing away a watery stool. At 6.30 P.M. he passed twelve ounces of bright blood, which at once clotted firmly in the bedpan. He slept well through the night, but in the morning he felt weaker; complained of great pain above pubes. Another small incision was made on the right side, where the skin was swollen and of a dark-red colour. Pus, with shreds of slough, escaped from all the incisions. Ordered one ounce of brandy every hour and a half, and half a drachm of laudanum at night. Temperature 96°; tongue dry; pulse 120.

On the morning of the 21st the large slough on scrotum was removed, leaving the testicles in the tunicæ vaginales exposed. From this time he gradually got weaker, less and less conscious, with occasional twitchings and startings, and died on the evening of the 23rd, the ninth day after admission, and tenth after the extravasation.

Autopsy, twenty hours after death.—There was discolouration of skin of hypogastric region, where there were several openings with sloughy tissue projecting from them. The sheath of penis was unaffected, but the testicles were exposed. In the perineum there was an aperture one inch in length. Left kidney weighed 2¾ oz. Capsule adherent and also to the tissue outside; pyramids scarcely visible; cortex almost gone; calyces thin and dilated, presenting signs of old pyelitis. Right kidney 5½ oz., in similar condition. Bladder slightly thickened and sacculated. Mucous membrane thickened, slate coloured, and intensely congested; on the right side, half an inch behind prostate, there was a circular patch of white false membrane with a crenulated margin, creased and folded on the surface when peeled off from the membrane, the epithelium was also removed. There was another small similar patch just behind trigone. The bladder, urethra, and rectum were removed *en masse*. Urethra: There was a laceration with sloughy edges on the left side of the membranous portion of the urethra, large enough to admit the little finger. In front of this, in the bulb, the urethra was strictured, just admitting about No. 7 catheter. In front of the stricture two false passages extended back underneath the urethra. Just in front of the bulb the urethra was entirely severed from above down, and the edges of the severed parts looked sloughy. The urethra in front of this was quite healthy. Rectum: Mucous membrane intensely congested, with hæmorrhagic patches here and there. Liver: Some old adhesions on the upper surface. No recent peritonitis. Old scars and adhesions at apices of lungs. Tricuspid and mitral valves of heart slightly thickened.

Remarks by Mr. HILL.—The above recorded case and that published previously have many points of interest. In one the patient, though not suffering from complete retention, was losing way rapidly from the irritation of chronic repletion of the bladder, which sufficed to keep up the suppuration of the perineum and constitutional disturbance. When rest and free evacuation of the abscesses were found to work no improvement, and the exhausting irritation was still maintained by retention of a quantity of decomposed, putrid urine in the bladder, of which the impassable nature of his stricture prevented evacuation per urethram, further measures were imperative, and puncture per rectum was selected as the simplest method under the circumstances of giving a free vent to the urine. Any attempt to seek the urethra in the perineum was very likely to fail, and the shock of a prolonged search through the enormously indurated perineum almost certain to render the patient too prostrate for recovery. In removing the source of irritation in the retained putrid urine the operation was successful, for when the bladder was freely drained the urine became clear, acid, and comparatively healthy. The difficulty of maintaining the cannula in the bladder is one usually not mentioned, though not a very uncommon one. The complication of erysipelas was an additional aggravation, and, until the post-mortem examination revealed the condition of the peritoneum, seemed to have been the immediate cause of death.

The second case afforded a typical example of the fatal effect that attends the rapid infiltration of unhealthy urine into the cellular tissue. The history of the case suggests that the urethra was not ruptured by the blow that wounded the perineum, for the permeability of the urethra was retained for thirty-six hours after the accident, and it was not until the bladder became overcharged with urine, and forcible expulsive attempts were made, that the usual phenomena of laceration and infiltration took place—namely, a sudden snap felt in the perineum, followed immediately by sharp pain, and shortly afterwards by swelling of the scrotum and contiguous regions.

SOUTH LONDON OPHTHALMIC HOSPITAL.

TWO CASES OF SCLEROTOMY FOR GLAUCOMA.

(Under the care of Mr. NETTLESHIP.)

IN the first of the two following cases Mr. Nettleship performed sclerotomy for the relief of pain and increased tension, which had continued to relapse after repeated iridectomies in an eye already far gone in glaucoma. The sclerotomy has been so far successful that since its performance, seven months ago, the patient has been very nearly free from pain, and the tension has never again been above the healthy standard.

In the second case sclerotomy was performed on an eye painful and quite blind from glaucoma, iridectomy being chosen for its fellow eye, in which some sight still remained. Both operations were successful in relieving the symptoms, but the tension was somewhat more reduced by the sclerotomy than by the iridectomy.

Hæmorrhage into the anterior chamber and into the vitreous occurred at both the sclerotomy operations, but in both the blood into the vitreous was almost completely

absorbed in a few weeks. This result, although of little consequence if the operation were performed almost as an alternative to excision of the globe, would, if it were unpreventable, be a serious drawback to the usefulness of the procedure on any but blind eyes. Mr. Nettleship thinks, however, that in both his cases the scleral wound may have been made somewhat further from the cornea than is needful, and that the ciliary processes for this reason were probably wounded. Both the cases present other points of more general interest.

CASE 1.—Mrs. W——, aged fifty-three, admitted Feb. 5th, 1875, with acute glaucoma of the left eye, of two weeks' duration; V = shadows; pain severe. Free upward iridectomy was done the next day (the 6th). The pain temporarily relieved, and vision improved, so that she could count fingers. On the 13th severe pain, referred to the temples, had returned; tension again somewhat increased. Second iridectomy downwards, only a small piece of iris being removed. The pain was relieved, and vision improved up to about 18 Jaeger.

On March 10th there had again been severe pain in both eyes, but worse in the left, which was now slightly congested, and its tension decidedly increased. She remained under various local and general treatments, but without further operative measures, until Sept. 15th, suffering at times from severe pain in the eye; the tension remaining somewhat increased throughout, and vision slowly sinking, so that on July 14th she could with this eye barely see letters of 20 Jaeger held to the temporal side; the lens became slightly more hazy. During one attack in April the tension was noted to be + 2 or 3. On one occasion the pain was very much relieved for a time by the artificial leech. Mercury and iodide of potassium were given for some weeks on the supposition that the choroidal disease in this eye might be syphilitic, and her symptoms modified by that diathesis.

On Sept. 15th simultaneous double iridectomy was performed inwards and outwards, the iris being thus divided into four parts, and the pupil acquiring a sort of diamond shape. The piece of iris removed from the inner wound was, however, small.

The tension was below normal for a few days, and all pain relieved for a fortnight, after this operation. In October, however, tension was again increased, and she had again had more than one attack of pain. Relapses of severe pain in the eye and corresponding side of the head continued; leeching relieved it only for a short time. Although she complained very much of the pain, the eye was never, when she attended, in the least congested, and the increase of tension was exceedingly slight. She said, however, that it had been sometimes bloodshot, and that the sight was worse on some days than on others.

On March 4th, 1876, sclerotomy upwards was performed. The anterior chamber, which was extremely shallow, filled with blood during the operation. The scleral wound bulged a little for the first fortnight, but afterwards gradually became quite flat, a narrow dusky scar alone remaining. A small red opacity remained in the front part of the vitreous for many weeks.

It is now seven months since the operation. She has been seen repeatedly. The tension has remained normal, and she has had scarcely any pain. Before the sclerotomy she was often kept awake by the pain; now she never is. The disc has been from her first admission grey and cupped, and there is some nuclear haze of lens. There had no doubt been chronic glaucoma before the acute attack. At the lower part of the equator and fundus is a long broad strip of diseased choroid, widest in front and gradually narrowing off behind, and consisting of little whitish patches, often confluent, and quite free from pigmentation. It probably marks the inner surface of a longitudinal scleral staphyloma.

The patient's right eye became glaucomatous a few days after the second iridectomy in the left, having been in a threatening condition before, and vision far from perfect (she could not read, and it was difficult to test her accurately). A single iridectomy was followed by permanent relief, sight remaining about as at the date of admission; once only she complained of some threatening of a relapse. The disc in this eye is not cupped, and there is no choroidal disease; the nucleus of the lens is probably not quite clear.

The patient had had good health till about two months before the acute attack in the left eye, when she had, within a few weeks, three attacks of imperfect left hemiplegia without affection of the face or loss of consciousness. After this she became nervous and weak, and on admission looked older than she was. She has had fourteen children. It is interesting, in regard to unsymmetrical peculiarities, to note that her mother, after having several seizures, was paralysed on the left side.

CASE 2.—Harriet O——, single, fifty-two, admitted April 19th, 1876, with double chronic glaucoma. History of premonitory symptoms (rainbows, pain in top of head and sides of nose) for five or six years, and of occasional temporary dimness (probably accommodative) since she was twenty years old. Definite failure of right eye began about four months before admission; left had probably been quite blind for much longer, though she did not know it.

On admission—Right eye: V — shadows, but cannot count fingers; T + 2 and other signs of subacute glaucoma. Media nearly clear, disc gray and moderately cupped; well-marked spontaneous arterial pulsation. Left eye: No perception of light; tension thought to be slightly less than in right; pupil dilated and oval; cornea very hazy; disc (dimly seen) very deeply cupped. Both eyes painful.

Iridectomy upwards in right, sclerotomy upwards in left.

The iridectomy was successful in keeping what sight remained for the right eye, and tension has remained normal or a little too high.

The sclerotomy has permanently reduced tension, so that it has always been since the operation slightly less than in the right. Both eyes have been free from pain since the operations.

After the sclerotomy the lips of the scleral wound were widely separated (by about $\frac{1}{12}$ inch) for several weeks, and for a time there was some bulging. The protrusion, however, had quite disappeared about two months after the operation, and the scar diminished in width till it became a narrow, perfectly flat, gray line. The anterior chamber filled with blood during the operation, and extensive bleeding took place into the vitreous; six weeks after the operation the latter had cleared enough to permit a dim view of the disc. There was also much subconjunctival ecchymosis over the whole visible part of the eye, and the yellow staining left by this had not quite disappeared at her last visit, four months afterwards. The upper part of the iris had become a little displaced towards the scar.

This patient had been stout and full-coloured till some little time before her sight failed, when she quickly lost flesh, although retaining a very large appetite, became liable to pain at the top of the head, noises in the head and giddiness, and to temporary failures of vision and of colour perception (*sic*). She has had no difficulty in shedding tears, and no contraction of palmar fascia. Since scarlet fever at two years her right lower limb has been paralysed, the extensors being quite powerless, and the flexors having become shortened. At forty years old she had severe articular rheumatism, and recently, while under care, had some rheumatism in her back. In other respects she had had good health until the illness of which the glaucoma appears to have formed a part. She is now pale, thin, and depressed. Her urine contained neither albumen nor sugar.

COVENTRY AND WARWICKSHIRE HOSPITAL.

INTESTINAL OBSTRUCTION, FOLLOWED BY PERFORATIVE PERITONITIS.

(Under the care of Dr. MILNER MOORE.)

THE following notes and remarks have been supplied by Mr. G. Herbert Lilley, resident medical officer.

The patient, a youth aged nineteen years, was admitted here for the first time on Sept. 21st, 1875, under the care of Dr. Lynes, suffering from colicky pains in the abdomen (more severe on the left side than elsewhere), constipation, and occasional attacks of vomiting of short duration, the matter vomited being nothing more than partially-digested food. He was treated with opiates, mild enemata, and warm baths, and was discharged on Oct. 22nd, apparently cured.

On June 4th, 1876, he was readmitted with a return of

the old symptoms, though somewhat intensified. On this occasion there was marked dulness in the left hypochondriac region, and a hard mass could be felt externally, occupying a considerable part of this region. A warm bath was ordered, and an enema containing an ounce and a half of castor oil to two pints of warm soap-and-water was administered while the patient was still in the bath. The enema brought away a great quantity of scybala, and produced almost instant relief. He was put to bed, hot linseed poultices were applied to the abdomen, and half a grain of opium was given in a pill every six hours. In less than a week patient could walk about, his bowels acted regularly, and he expressed himself "as well as ever." He was discharged on June 13th.

On June 19th he was again admitted with obstinate constipation and vomiting of stercoraceous matter. He complained of intense pain of a radiating character, extending from the umbilicus towards the left side of the abdomen. There was marked tympanites everywhere below the upper division of the abdominal cavity, while complete dulness extended from the right hypochondrium, through epigastric and upper part of umbilical regions to left hypochondrium. The previous remedies were again resorted to, excepting that half a grain of opium was given every four hours. The enema again succeeded in bringing away a quantity of hard feculent matter, and caused immense relief. He remained in bed for some days, enveloped in hot fomentations, when he was again allowed to sit up a few hours daily, and a mixture was prescribed of five drops of solution of acetate of morphia, thirty drops of tincture of hops, in an ounce of infusion of pale chinchona bark three times a day. In about a fortnight arrowroot and light meats were substituted for milk and beef-tea. Health and strength continued to improve, until he was again discharged as cured on July 21st, 1876. At the time of leaving the hospital his appetite was good, his bowels regular, and there was a total absence of pain and tenderness over the abdomen.

On August 15th patient returned with all the symptoms present on the previous admissions much intensified in character: abdomen tense and much distended, dulness in flanks and at upper half of anterior surface; tympanitic resonance at lower half; great tenderness on pressure; constipation; vomiting of stercoraceous matter at first, but of dark fluid resembling altered blood before death; pulse 130 and very feeble; features haggard and pinched; urine scanty, high-coloured, and voided with some difficulty. A decided loss of flesh observed since last discharge from the hospital. All the remedies hitherto adopted were again tried, but without any appreciable result. In spite of effervescents, ice, &c., almost incessant vomiting set in, and continued until midday of August 16th, when the patient succumbed.

Autopsy, forty-eight hours after death.—On opening the abdominal wall a quantity of very fetid gas escaped; the peritoneum was everywhere adherent to the abdominal parietes, and extremely vascular. In the pelvis some considerable effusion of dirty, semi-purulent, serous fluid was found. The small intestines were swollen and much congested, and the transverse colon was hard and enormously distended. There was increased vascularity over the whole of the exposed intestinal surface, and more especially where the coils met; irregularly-dispersed flakes of lymph were dotted over the various abdominal organs. On removing the large intestine from the cavity of the abdomen, the length from the cæcum to the lower end of the rectum was a little more than 4 ft. The diameter of the colon at the cæcal end measured 11½ in., at the middle of the transverse portion 12 in., and at the splenic flexure 11½ in. The thickness of the wall of this portion of the colon amounted to about one-third of an inch. The mucous membrane of the colon throughout its entire length was found to be studded with numerous black impressions, each corresponding in size with fruit seeds, which abounded in the fæcal matter contained in this part of the intestine. On measuring the quantity of the retained excreta, there was almost sufficient to fill two ordinary-sized washhand-basins, and it was principally composed of nodular masses, each having as a nucleus a cherry- or damson-stone (a great number of these stones being found in the interior of this portion of the colon). At the cæcal end there was a perforation at the base of the vermiform appendix, a small ulcer being present about the size of a large pea. The greater part of the appendage itself had sloughed away. At this point some fæcal matter had escaped into the peritoneum. At the opposite end of the colon, immediately beyond the splenic flexure, the intestine had become so contracted as to admit with difficulty the end of the little finger, while at the angle of flexure itself there was a mass of infiltrated and disorganised bowel-tissue, dense and fibrous on its outer aspect, but soft and friable on the inner. Here perforation had taken place to some considerable extent. There was a hole, about the size of half a crown, situated in this mass, and communicating directly with the peritoneal cavity, and a quantity of fæcal matter had forced itself through the opening. Near to this spot the wall of the intestine was extremely thin in places, from an extension of the ulceration along the mucous membrane. Beyond the constriction in the gut, the descending colon and rectum were found empty, and appeared atrophied to some extent.

From the history of the case it would appear that the constriction of the intestine was the result of repeated attacks of enteritis, leading to cicatrisation, and that for at least a year some obstruction in the bowel had been present. Although no foreign substances had been observed in the excreta, liberated by the enemata on the three previous administerings, yet it is probable that each attack of obstruction was the result of some foreign body interfering with the onward flow of fæcal matter at a point where the vermicular action was already weakened by cicatricial tissue. It was known that the patient had been in the habit of eating the most indigestible of food to ward off hunger. From the amount of collapse present before death, and from the extensive perforation of bowel, and consequent amount of fæcal extravasation—evidently post mortem—it is manifest that the fatal result was due to the over-distension and rupture of the bowel at its weakest point. The smaller perforation at the cæcal end must have been secondarily induced.

Reviews and Notices of Books.

A Manual of General Pathology. By ERNEST WAGNER, M.D. Translated from the Sixth German Edition by JOHN VAN DUYN, A.M., M.D., and E. C. SEGUIN, M.D. London: Sampson Low, Marston, Searle, and Rivington. 1876.

EVERY student of pathology will gladly hail the appearance of this well-known and admirable work in an English dress. Again are we indebted to the industry of our American brethren for adding yet another to the long list of translations of standard German authors. To have translated "Uhle and Wagner" was no mean undertaking, and Drs. Van Duyn and Seguin are to be congratulated as much for their enterprise in the matter as for the accuracy and faithfulness with which they have fulfilled their task.

Of the intrinsic merits of the work itself it is hardly necessary to speak, for ever since the first edition appeared, fourteen years ago, it has been the leading book of reference on the subjects upon which it treats. Originally planned nine years before it first saw the light, by two workers in the same field, Uhle and Wagner, it at once received full recognition, and took a position almost unique in medical literature. The first-named author died on the eve of its publication, so that from the first Prof. Wagner has been the sole editor, although in successive editions he has been aided in the compilation of some sections by other hands. With each edition the work grew, and, owing to the rapid extension of pathological inquiry and the rise of new doctrines on many controverted subjects, the labour of reconstruction and addition must have been considerable. This labour, however, has been undertaken with the same care and thoroughness that were such marked features of the original work, and the result is that the present edition (which is brought down to the year 1873) is as complete an exposition of the pathology of to-day as could be desired.

The work is divided into four parts. Part I. deals with General Nosology, and consists of an introductory thesis upon diagnosis, prognosis, course and terminations of disease, &c. Part II. is entitled "General Etiology," and contains an excellent account of predisposing and exciting causes of disease, which must be as invaluable to the lecturer on systematic medicine as the subsequent chapters are to the teacher of pathology. Individual and social hygienics here find a place. Although of necessity these subjects cannot be dealt with to their full extent, yet much valuable information is conveyed within these pages that would be sought for in vain in many a similar work. Part III. is the most valuable to the pathological student, as it is the most elaborate portion of the book. It is entitled "General Pathological Anatomy and Physiology," and opens with the subjects of local disturbances of the circulation and of inflammation, and then treats of the degenerative changes of tissues. The section on Tumours is very complete, including a vast amount of detail of the work of individual observers. The subjects of the fourth part, which deals with the Pathology of the Blood, include an exhaustive account of the febrile process, which, like the other portions of the work, is a very mine of historical research.

The book is emphatically a work of reference, and one which no student, and certainly no teacher, of pathology should fail to have constantly beside him. It is, indeed, invaluable to such a one, for a reference to its pages will often spare him many a tedious search after authorities. It is a book which could not have come from any other country but that which furnishes the admirable year-books of medical science. The only fault, if it be one, is that German investigators are almost the only ones referred to in its pages; but it cannot be denied that Germany, with its multitude of pathological laboratories, numbers its hundreds of patient workers, where other countries only furnish their tens.

A Practical Treatise on Urinary and Renal Diseases. By W. ROBERTS, M.D. Third Edition. London: Smith, Elder, and Co. 1876.

THE third edition of Dr. Roberts's well-known and excellent treatise contains but few additions to the second edition. The whole has, we are told, been carefully revised; but the work had already been brought so thoroughly up to the present knowledge on the subject that a few new facts and opinions here and there constituted all that was necessary to add in the present issue. The new matter includes an account of Russel and West's method of estimating urea in urine, and of Dr. Lewis's discovery of the filaria sanguinis hominis and its connexion with chylous urine. The author's method of estimating albumen quantitatively is also described. It is a very ingenious method; but will not, we fear, equal in practical usefulness his method of estimating sugar by fermentation. Brief outlines are introduced of Dr. Dickinson's researches on the morbid anatomy of diabetes, and of the theories of Sir William Gull and Dr. Sutton on arterio-capillary fibrosis in its bearing on granular disease of the kidneys. The latter does not receive so critical a discussion as we might expect from so competent and thoughtful an observer as Dr. Roberts. A curious omission in this edition deserves notice. Most readers of previous editions will remember the figures of pigmentary particles deposited from urine. These are omitted in the present edition, because the author has come to the conclusion, suggested to him by Dr. Richardson, of Philadelphia, that these are not urinary deposits at all, but depressions on the surface of the glass, which have become filled up with dirt &c. It is curious, if this is the explanation, how such a mistake could ever have arisen.

The Theory of Sound in its Relation to Music. By Professor PIETRO BLASERNA, of the Royal University of Rome. Being Vol. XXII. of the International Scientific Series of Henry S. King and Co.

THIS work is an attempt to popularise the theory of music, and so to combine the theoretical with the practical study of this art that instrumentalists may obtain some knowledge of those fundamental laws of sound on which music is based. With this object in view Professor Blaserna commences his treatise by explaining the laws of vibrations of strings and pipes, and shows how such vibrations may be measured; he then explains the theory of music in reference to the consonant and dissonant intervals, pointing out how the various ratios in the octave have been introduced, together with the nature of the perfect major and minor chords, the inversion of which, he observes, constituted the principle resource of Palestrina and of the composers of his school. This leads him to speak of dissonances, and of the nature of the musical scales. An exceedingly interesting *résumé* is then given of the history of music from the earliest period to the present day. In the music of all nations, Professor Blaserna remarks, two unfailing characters are found—rhythmic movement and procedure by determinate intervals. The former appertains to many of the actions of man, but the second belongs exclusively to music. The instrument of Orpheus, however powerful its effects may have been in rendering inanimate objects "sequacious of the lyre," was but a poor instrument, consisting only of the following four notes: C, F, G, and the octave C. It is remarkable that this scale contains the most important musical intervals of declamation, the voice rising a fourth in making an interrogation, another a fifth higher in emphasising a word, whilst in ending a story it falls a fifth. In speaking of Greek music he explains the difference between the Pythagorean and the modern scale. The ancient Scotch and Chinese scale, in which an enormous number of popular songs are written, consists of a succession of fifths, B♭, F, C, G, D.

The inventor of the modern system of musical notation was Guido d'Arezzo, and by him and Josquino and Orlando Tasso polyphonic music underwent great development. Then came the Reformation, and church music was greatly simplified to enable the whole congregation to join in it. An elaborate discussion of the characters of the major and minor scales succeeds, with an account of the effects of transposition. The temperate scale in common use is then explained, and its imperfections are declared to be so manifest that the author expresses a hope it will eventually be abolished. It is, in fact, only maintained by the pianoforte, which is essentially the instrument of the temperate scale, and the defects of which have greatly tended to obscure pure melody. The quality or timbre of musical sounds, both vocal and instrumental, is then referred to, and the methods of investigating the vibrations are given, as well as the laws of harmonics and chords. Finally, Italian and German music are compared. The influence of Paris on music, though the French have never been creators, is defined as insisting on the creation of a type of music which should contain the good points of the German and Italian schools without their exaggeration. It has maintained the Italian melody and song, but has also adopted the grand choral and orchestral movements of Germany. The work is illustrated by some good woodcuts, chiefly taken from Professor Tyndall's well-known work on sound.

THE Runcorn Board of Guardians have increased the salary of Dr. McDougall, medical officer for the Runcorn District, from £50 to £70 per annum.

THE LANCET.

LONDON: SATURDAY, OCTOBER 7, 1876.

"MORE honoured in the breach than in the observance" seems to be a growing opinion regarding the delivery of an introductory lecture at the opening of a metropolitan medical school. Among the innovators on the old custom are this year to be reckoned two out of the three leading schools. It is no doubt well to vary every custom from time to time, lest its interest should depart with a stereotyped reiteration, but the occasion is unquestionably a favourable one for a word in season, and the value of the "introductory" will depend on the use to which the opportunity is put. Many a student bears through life the impress and result of the sentences of encouragement and advice which are the first words he hears of academical instruction, and it is rarely indeed that we have to regret that those words contain anything that can lower his standard of his life's work or sap his strength to pursue it. It may perhaps be questioned whether the student does not now suffer somewhat from the wide publicity the introductory addresses receive, and whether the addresses are not often framed rather for the wider audience than for those to whom they are spoken.

Few, if any, of the introductory addresses which have been delivered this year are open to this criticism. The average of preceding years is well sustained, and one or two of them stand out conspicuously for the rare ability or practical wisdom which they display. For the former characteristic the palm must certainly be awarded to the address of Professor MAUDSLEY at University College, the high-ranging thought and polished sentences of which we place before our readers to-day. It commences with a touching reminiscence of Dr. PARKES, from whom the speaker had heard, twenty-five years before, an address which was, indeed, of somewhat different tendency. Knowledge may come, but wisdom must linger, and Dr. MAUDSLEY, disclaiming any attempt to put his hearers in possession of the wisdom which long years had brought, passed on to a theme, old, yet ever new, on this occasion—the character of the profession his hearers had embraced, and urged upon them its true estimate and true end: that its high philanthropic object should be always present and foremost in their minds, and never lost sight of among the subsidiary motives which crowd around in the course of a medical man's career. He rejoiced that peerages are not among the prizes of the medical profession, since a "pitiful social ambition might tempt us to spoil the simple intrinsic nobility of our vocation with the outworn decorations of a childish age of human progress." The high end of our profession is reciprocated in the esteem in which it everywhere is, and always has been, held, which protected LIVINGSTONE from harm among the wild tribes of Central Africa, and gave to the medical captives in the deserts of Scythia their high market value. The effect of medical education is not unworthy of its aim. It is "excellently well adapted to make the most of the intellect as an instrument of knowledge." The instruction is, or ought to be, at first hand. In intercourse with Nature, sophistry and pretence avail nothing; sincerity and humility and veracity of mind are essential. Correspondence between the order of our ideas and the order of Nature is the end of education, according to Dr. MAUDSLEY, and he illustrated the imperfection of conventional education in an amusing fancy of the astonishment which PLATO or ARISTOTLE would feel to find their methods so little extended with the widening thought.

Into the region into which much of the latter part of Dr. MAUDSLEY's address takes us it would be out of place for us here to follow him, and we cannot help thinking it was out of place for him, before a student audience, to enter. It was putting strong meat before those many of whom were certainly incapable of digesting it, and who were not unlikely to suffer in the attempt to do so.

From the complacent pity with which Dr. MAUDSLEY regards those of older creeds than his own we turn with pleasure to his hopeful estimate of the future of medicine. He wisely urged that its sciences constitute a mental training which fits men, far more than most forms of education, to understand and work for their fellows, and that it would constitute the fittest of all training for the statesman. Preventive medicine has already yielded results to which those of curative medicine cannot compare, and for preventive medicine a future lies of which at present perhaps we have little idea. If the physician does not actually supersede the "preacher," the latter will at least be taught by the former, and in the application of the methods of medicine to morals and religion lies its highest future.

One illustration which Dr. MAUDSLEY gave of the need for the penetration into social custom of knowledge now chiefly medical—the perpetuation of disease by reckless marriage—was alluded to also by Dr. BLANDFORD in his address at St. George's Hospital. He urged with much force the scope for preventive medicine which diseases of the nervous system present, and pointed out how grave may be the ultimate consequences of some of the tendencies which are becoming conspicuous. One of these, which is worthy of very wide consideration, is the effect on offspring which is likely to result from the attempt of women who are bearing children to occupy themselves with the anxieties and responsibilities of callings which are, as a rule, followed by men. He traced very widely the effects of marriage in the perpetuation of disease, and wisely condemned the popular idea that marriage is a panacea for all the nervous ills to which a girl is liable—an idea prolific of misery to the individual and of detriment to the race.

As was natural, the subject of vivisection was a prominent topic in more than one address. Dr. MAUDSLEY traced in the opposition to experiments on animals the expression of a deeper feeling than the pity to which it is usually ascribed, and found in it the expression of a fear of the destruction of traditional belief. The subject received more practical discussion from Dr. ANDREW CLARK at the London Hospital, who devoted a large portion of his excellent address to an earnest and wise plea for experimental inquiry as a necessary,

and at present the chief, means of advancing both the art and science of medicine. While recognising fully the responsibility to avoid needless suffering, he deprecated the agitation with which physiological and pathological workers are threatened, and asked, with Dr. MAUDSLEY, whether it had not a deeper source than mere benevolence to brutes, since the extent of its manifestation was so incommensurate with the cruelty which simple benevolence should regard. The relations of the science of medicine to other forms of knowledge, the difficulties met with in its cultivation, the methods to be pursued in its advancement, and the influence which medical training should have on the mind, were other topics touched upon by Dr. ANDREW CLARK.

The influence on posterity of the preventive medicine of the present, which forms the subject of one or two hopeful passages in Dr. MAUDSLEY'S address, was also a prominent topic discussed by Dr. WILTSHIRE, at St. Mary's Hospital. He insisted, in substance, that our duty to our successors of the next generation ought to be as conspicuous among our motives as our duty to our neighbour. National health is indispensable to national vigour, and the *omnia sanitas* must come more and more before the attention of statesmen. Dr. MAUDSLEY'S lament at the practical abnegation by Government of Lord BEACONSFIELD'S motto will meet with a general echo.

The more immediate subjects and objects of medical education formed the topic of the addresses of Dr. BAXTER, at King's College, and of Dr. EVANS, at the Middlesex Hospital. The former dwelt wisely on the necessity of the student acquiring a scientific habit of mind, rather than the acquisition of a certain number of facts and theories. The system of medical education received less attention than it in some years obtains, but was criticised with some severity and much acumen by Dr. MITCHELL BRUCE, at the Charing-cross Hospital. He deprecated the tendency to make the student's mind a mere storehouse of facts, while he was ignorant of the methods of science, and urged that more time should be given to physiology, botany, and zoology, and less to anatomy. Dr. ALLCHIN, at the Westminster Hospital, dealt with the science and art of medicine as a marketable commodity, the qualifications of those who practise it, and the position of the public in regard to it.

Local medical history, the rise and progress of the school of medicine at which they were delivered, formed, as is common, a prominent feature in one or two of the addresses. Dr. ANDREW CLARK sketched the history of the London Hospital and College; and at St. Thomas's, Mr. FRANCIS MASON gave a lengthy sketch of the distinguished past of that school of medicine, and traced it back to the eleventh century, when, as an almshouse, it stood where the Charing-cross Railway station now stands, and he gave an interesting outline of the great men who had been associated with the hospital, and claimed for it the honour of being the place at which the first vaccination in London was performed. He digressed into a few of those points in the history of surgery with which some of the names mentioned were intimately connected, especially the facts relating to the association of the arts of the barber and the surgeon, and of their dissolution.

IN offering a few observations to students who have this week entered upon the study of medicine, we desire merely to give expression to some thoughts that are the result of experience—experience, however, that is sufficiently old to "attain to something like prophetic strain." Fruitful as every department of science has been during the last half century, none has developed more rapidly than that of medicine, and a glance at the medical journals and serials that are disposed on the table of any good library will show how much activity prevails in every branch. With these, however, the young student has nothing to do. His business is to acquire a good general knowledge of the country he is about to explore, to be quite certain of the great landmarks of chemistry, anatomy, and physiology, and during his first year at least he need trouble himself very little about details. But even thus, the student has enough upon his hands, and his first, second, and third duties are work, work, work. He should early cultivate the habit of attention; for attention, like other mental actions, is in a great measure a matter of habit, and hardly any faculty is more important for the intellectual progress of man. By a well-known physiological law the mind soon grows to the performance of any act, and repetition renders it more and more easily accomplished till it becomes at length as unconsciously effected as walking or writing. To guide him in his onward path the greater number of both metropolitan and provincial schools have tutors attached to them who are alike able and willing to give assistance wherever it may be needed; but too much must not be expected from them. We have some faint suspicion that the tutorial system has reached, if it have not surpassed, its proper limits. It is well to place the beginner on the right track, to tell him what books, or what parts of a book, he should read, to explain a difficult bit; but there the tutor's business, we humbly conceive, so far as the freshman is concerned, ends. The student must count for himself the number of articulations of the several bones, the muscles attached to them, and the branches of the nerves and arteries. To be everlastingly cramming carefully-selected scraps of information into the junior class is the height of absurdity; something must be left for the student to do for himself, and not the least of the pleasures he experiences in gaining larger and wider knowledge is that of overcoming the difficulties that are presented to him. The subjects embraced in the medical curriculum are so large, whilst so much information is expected from the student in his examinations, that we fear there is but little, if any, time left for billiards, cards, music, and athletics. Charming as these are in enabling an idle man to get over the day, they interfere sadly with literary occupations, and, without being hard-hearted, we cannot but say the less they are indulged in the better. At the same time, we do not wish to depreciate the advantages and indeed the necessity for the preservation of health, of moderate physical exercise, for a studious man. All work and no play is bad both for mind and body. The acquirement of knowledge is at best a slow process. No man, be his ability and memory what they may, can learn anatomy, physiology, or chemistry by reading a text-book as he would read a book of history or travel. They cannot be "got up" by skimming a page here and there, and skipping the intermediate ones. They form a

coherent whole, and the more thoroughly each part is known, the less likely is any part to be forgotten. However depressed or discouraged our young friends may sometimes be, let them lay this to heart, that there is not one man in this profession, or, indeed, in any other, who has risen to eminence without having exerted energy and perseverance, without much self-denial, and without early and continual devotion to the special branch in which he has gained his laurels. Here, as elsewhere, *quisque faber fortunæ suæ*.

M. BOCHEFONTAINE recently presented a note to the Académie des Sciences on some particulars of the "reflex" movements which are produced by mechanical stimulation of the cranial dura mater. His observations are of great interest, both physiological and pathological. That the membrane is sensitive is shown by the fact that when certain portions are irritated, cries of pain and general movements are produced. But the mechanical stimulation of certain parts produces, under certain conditions, movements limited to one or several parts of the body. The facts were observed in dogs, which were experimented on in order to study the excitability of the grey cortex of the brain. Some were etherised, others chloralised by intravenous injection, and others were slightly stupefied by curara. One part of the skull had been removed to expose the cranial dura mater. Under these circumstances, by scratching gently with the point of a dissecting forceps the parts of the dura mater situated at the level of the middle of one side of the cerebral hemisphere, the eyelids closed on that side, and sometimes the upper lip was raised, the nose was drawn to that side, and the ear was moved. A stronger irritation occasioned a simultaneous movement of the limbs on the opposite side, and of the tail, which deviated from the side of the irritation. A still stronger irritation, rapidly and several times repeated, determined movements of both sides of the face, of the neck, and of all four limbs. The movements of the limbs on the same side were more energetic than those of the opposite side. The irritation of several points of the dura mater situated anteriorly in the frontal region also caused isolated movements of the eyelids, or of some of the muscles of the face. These movements were not observed when the points were irritated outside or behind the middle portion which was first excited. In the latter case the irritation was followed only by movements of the trunk.

M. BOCHEFONTAINE next endeavoured to ascertain whether these phenomena, observed when the dura mater was intact, were equally to be observed when it was divided so as to expose the convolutions. He divided the anterior portion of the dura mater into four segments. When the anterior segment was indented with the teeth of the dissection-forceps, whether strongly or gently, there occurred corresponding movements of the limbs, or limited to the orbicularis of the eyelid, just as in the experiments in which the dura mater had been merely scratched with the point of the forceps. The compression of the outer and posterior segments caused no movements limited to the face, and only those of the members and of the different parts of the body. On pinching the inner segment, seven or eight millimetres from the falx cerebri, no movement was produced. Hence the conclusion is drawn that the transmission of the stimulation or irritation of one side of the dura mater is not by any sensory nerve-fibres coming from the opposite side. The results are manifestly not due to any accidental stimulation of the subjacent grey cortex, since this is inexcitable by mechanical agencies. But in order to avoid all chance of error from this cause, M. BOCHEFONTAINE repeated his experiments after having removed the grey cortex and the subjacent white substance from the whole of the extent of the sigmoid convolution. The phenomena observed were exactly the same as those noted before the removal of the cerebral substance. It is thus clear that mechanical stimulation of the cranial dura mater on one side will cause contraction in one or more of the facial muscles confined to the corresponding side. To obtain this result, the irritation of the dura mater must be slight, or the animal must be placed under a certain degree of anæsthesia. A stronger mechanical stimulation causes, at the same time as the contraction of the face, movements in the limbs of the corresponding side; and if the stimulation be still more intense, movements occur in all four limbs, those of the same side being moved more strongly than those of the opposite side.

What path is taken by the irritation in passing from the cranial dura mater to the muscles? is a question which at at once presents itself. When the movement is confined to the orbicularis of the eyelids the course is a simple one. It can reach the nerves directly as they traverse the substance of the membrane. A similar explanation accounts for the movements of the face on the corresponding side. It is more difficult to understand the mechanism by which the movements are produced in the corresponding half of the body. Were the stimulation direct it would seem that the movements should occur in the opposite limbs. As it is not so, the conclusion is that the stimulation is transmitted directly to the corresponding side of the spinal cord. When all four limbs are moved the irritation is transmitted, both directly and by decussation, to both sides of the cord. But the direct transmission is more intense than that which passes by the decussation of the pyramids.

These observations are undoubtedly of great interest and importance. They need, as they will no doubt receive, repetition and corroboration at other hands. They have direct bearing on the phenomena obtained on irritating, by electricity, the surface of the brain; they are of great significance with regard to the origin of the symptoms which attend inflammation of the dura mater, and their character has an important bearing, in more than one respect, on the remarkable opinions of Dr. BROWN-SÉQUARD now being laid before the profession.

READING the accounts of the Congress of Public Health and Safety at Brussels, and of its proceedings, it would almost appear as if we were about to enter upon a hygienic millennium. Petted by royalty, feasted and entertained in high places, and generally existing in a seventh heaven of self-adulation, the Congress presents a sort of apotheosis of hygiene. The painter's art will surely step in to perpetuate the scene, and we, on our side the Channel, may hope to see on some lofty ceiling, or wide spread of canvas, Mr. CHAD-

WICK, Captain DOUGLAS GALTON, Dr. RICHARDSON, Dr. DE CHAUMONT, Dr. HARDWICKE, and others depicted amongst the gods, radiant in pigmentary glories, Hygeiopolis shining under the rays of a millennial sun in the background. The pleasing vision is confirmed by so much of the proceedings of the Congress as have as yet reached these shores. It would appear (unless, indeed, the abstracts of papers and discussions in the daily journals are curiously incomplete) as if by common consent the hygienists who have taken an active part in the public-health work of the Congress have ignored the present, and dealt with a remote past or imaginary future of their subject. At any rate the working hygienists of this country, the men who have of late been filling the columns of the daily papers with their troubles, the men who have to deal with the unsatisfied, even rudimentary health-wants of communities, must have felt how little helpful the Congress was to them in their work. Hospital hygiene has been discussed by it without any consciousness, apparently, of the exceedingly important light which has of late years been thrown upon the true relations of hospital administration, especially in regard to the management of surgical cases, to hospital construction—a subject which lies at the bottom of the question of so-called "hospitalism." Quarantine was considered as if it might be an abstract question without apparently the least reference to the very serious matters now pending with regard to it in relation to plague. The resumption of quarantine practices of the old type in the Turkish dominions in the East during the past three years, under the alarm of plague, and the tacit support given to this resumption by the larger number of the great maritime powers of Europe, might well have occupied the attention of the Congress. The disastrous results of the futile quarantine maintained as to plague this year in Mesopotamia upon the well-being of the population of the province, and upon its trade, fully deserved the consideration of the Congress. The important question of the regulation of emigration, judging from the illustrations given, seemed to touch little upon the necessities of the present moment. It would be as pertinent to cite the state of hospitals in JOHN HOWARD'S time as an example of the necessity for present hospital reformation as to cite the state of emigration from Ireland in 1847 as an example for present emigration reformation. Even in regard to house-hygiene sentiment appeared to preponderate in the discussions over practice. The Congress seemed more at home in dealing with the proposition that it is desirable that death, when it occurs, should be determined in some precise manner before it is assumed that the individual is withdrawn from the influence of hygienic measures. It was less at ease in dealing with the question of the least harmful ways of disposing of the dead. Let us hope that when the proceedings of the Congress come to be published in detail they will prove to be less Laputan than the reports in the general press would make them seem to be.

THE Board of Trade has ordered an official inquiry to be held on an outbreak of scurvy on board the *Eurydice*, on her passage from Rangoon to the Thames. A case was admitted into the Seamen's Hospital last week from the ship. The man died a few hours after admission, and an inquest was held.

Annotations.

"Ne quid nimis."

THE PLAGUE.

ALTHOUGH upwards of a week has passed since the news given in our last issue of plague having appeared among the Turkish forces in Servia was received by telegram in England, no confirmation of the report has, strange to say, appeared. It is true that the telegraphic news was followed by a note to the same effect, addressed to *The Times*, by Mr. Lewis Farley, the Secretary to the League in Aid of the Christians in Turkey. But Mr. Farley's news, as the telegraphic news, came from Servian sources, and to the present time no like information has been received from Turkey. We hope, therefore, that the alarm has been a false one. Mr. Farley's suggestion that plague may have been carried into Servia by Turkish troops sent from Asia Minor to the seat of war hardly admits of serious discussion. Plague is not known to have prevailed this year in any part of the Turkish dominions in Asia north of the district immediately surrounding Bagdad, and lying between that city and the Euphrates. The report of plague having appeared in Persian Kurdistan is now contradicted, the disease which excited alarm there being now stated to have been small-pox. There is no likelihood, therefore, of plague having found its way into Servia from any of these districts in the track of troops without manifesting traces of its existence in passage. On the other hand, recent accounts from correspondents of various journals in Turkey agree in describing a miserable state of things among the sick and wounded of the Turkish forces in the field, and presumably the troops generally are ill-found in many things necessary for the maintenance of a good standard of health in active service. We should not be surprised, therefore, to learn that typhus had broken out in the Turkish encampments. Again, it must be remembered that the low-lying grounds of the Danube and of its affluents are the haunts of malarial fever, and have before now proved very fatal to armies encamped there. It is not necessary then to assume plague because a fatal and even contagious disease may have broken out in the Turkish army. It would, however, be premature to come to any conclusion on the subject; for, if we have not a confirmation of the news of plague, we have no authentic information as to the prevalence of any other disease.

FATAL HOLIDAYS.

"A SORROWING PARENT" last week published in the daily papers a letter written by a son who recently died from the results of drinking water contaminated with sewage, and which illustrates the dangers to which we are exposed when we venture away from our own protected dwellings. In this case the young man contracted his illness at lodgings at Thames Ditton, for here it was the fatal dose, drawn from a polluted well, was taken. Fever ensued, and might probably have been recovered from had he not been exposed, at Herne Bay, to the possibility of receiving a second dose of poisoned well-water. However, be that as it may, soon after his arrival there he had a relapse, and died. It is but poor consolation to offer the bereaved parent to say such cases are common—alas! too common; still it is to be hoped that the expression of sympathy that has been aroused in this instance will lead to the much-needed agitation for the sanitary supervision of hotels, lodging-houses, and public institutions being vigorously and persistently raised. No lodging-house, hotel, school, college, &c., ought to be permitted to receive inmates till

certain sanitary conditions (especially as regards drainage and water-supply) have been complied with; and, beyond this, they ought to be compelled to obtain every year, from a competent sanitary authority, a certificate stating that all the sanitary arrangements are maintained in perfect working order. The want of this very obvious and simple precaution has caused, is causing, and will continue to cause much needless sorrow and suffering—the deeper, perhaps, because of the reflection that "what should have been for the health has been an occasion for falling." Some of the cases that have come under our notice have been especially sad. In one case a gentleman loses a young wife from typhoid fever, the cause of which is traced to polluted water drunk at an hotel situate on the banks of the Thames, where they had spent a brief holiday. In another, a newly-married couple take a furnished house at a fashionable sea-side resort to spend their honeymoon. One month after their arrival the husband is attacked with fever, and dies; also a friend, who happened to pay them a visit about that time; whilst the maid servant also suffered severely from the same disease: the cause, well-water polluted from an adjacent cesspool. In another instance it is parents deprived of children from diphtheria, contracted at a lodging at the sea-side from obvious defective sanitary arrangements in the house itself. We might multiply such instances, but, as we said before, they are so common that most households have similar experiences to relate. But, to show how the simplest sanitary precautions are neglected in hotels, even in large towns and in houses in repute for the excellence of their general management, we would state that last week we happened to stay at two large towns—one a fashionable watering-place, the other a large county town. At the hotel of the first place we found a soil-pipe in the ground floor watercloset, close to the coffee-rooms and passages, broken through the joints, but repaired by wrapping an old piece of flannel round it. An excellent provision for the dissemination of sewer-gas in that part of the house! At the other hotel we were shown into a bedroom that was positively offensive, the smell apparently ascending from the head of a rainwater-pipe, which was just under the bedroom window. Both these cases, coming casually under observation, are instances of grave sanitary neglect, and delicate and susceptible persons exposed to the influence of the emanations proceeding either from the soil-pipe or the rain-water-pipe would probably have suffered severely.

CONDITION OF THE NERVES IN PERFORATING ULCER OF THE FOOT.

IN a communication made to the *Lyon Médical* by Dr. Michaux on this subject, after referring to the opinion which has gradually gained ground of late years, based on the numerous observations and papers of Mitchell, Charcot, Brown-Séquard, Mougeot, and others, that perforating ulcer of the foot is always associated with degenerative lesion of the nerves of this region, he maintains that, seductive as this theory is, it does not rest on a satisfactory foundation. Perforating ulcers, he remarks, cannot be assimilated to the ulcers observed in muscular atrophy, locomotor ataxy, or in traumatic lesions of nerves; for, if so, why should not the ulcers occurring on the heel, consequent on traumatism of the spinal cord, be included in the same category? The characters of perforating ulcer of the foot are very well defined, and Dr. Michaux has had the opportunity of making a complete autopsy of a patient who suffered from a typical form of the ulceration in both feet. On both feet there were two ulcerations—one on the heel, and the other on the plantar surface of the great toe. The surface of the ulcers was completely insensible, and there was a notable diminution of sensibility of the skin of the leg, but the skin of the thigh retained its normal perceptivity. Diarrhœa set in; the patient became cachectic, and died about two months after admission into the hospital (St. Etienne, Lyons). Post-mortem examination showed great œdema of both legs; the existence of a layer of pus between the superficial and deep layers of muscles of the right leg; the presence of pus in the calcaneo-astragaloid and scapho-astragaloid articulations, the ligaments of which were destroyed. The os calcis was of a greenish colour, necrosed, and broken into two fragments. The posterior tibial nerve was affected with gangrene throughout its whole length; it had a greenish colour, was bathed in pus, and, on microscopical examination, exhibited only the granular remains of nerve-tissue with connective tissue. It was evident that this gangrenous condition was a phenomenon consecutive to the deep suppuration, and therefore posterior to the appearance of the ulcers on the foot. The nerves of the left leg were healthy, as were also those of both thighs. The spinal cord was also normal. Dr. Michaux concludes his essay by dividing the numerous and varied forms of ulceration of the foot into two categories. 1. Ulcerations symptomatic of different affections of the spinal cord or nerve-trunks, which are always accompanied by more or less grave symptoms—such as ataxy, formication, numbness, and paralysis,—and in which degenerative neuritis may be discovered. 2. Idiopathic perforating ulcer, which is the true perforating ulcer of Nélaton, which does not appear to be connected with a degenerative neuritis, but only presents a kind of peripheric sclerosis of the nervous ramifications.

INTERNATIONAL AID SOCIETY.

WHILST the Franco-Prussian war was in progress, it will be remembered that the national sentiments of humanity and pity for the suffering found an outlet in aiding the wounded of both armies. The Germans were, as everybody knows, eminently successful—and nothing succeeds like success; and, to do them justice, they had done their best to deserve it by their complete system of organisation and administration. They did not stand in need of assistance, and being self-reliant and imbued with ideas of their own in regard to discipline, they were, naturally enough, unwilling to hand over their sick to the separate charge of foreigners and extend independence of action to the medical *personnel* of the English ambulance. With the French it was different. If we remember aright, a certain sum of money was very impartially divided between the two belligerents by the Red Cross Society, and appropriated for the relief of their respective sick and wounded. It is always an ungracious thing to curb expressions of benevolence, but we could not at that time help feeling that the succour of the wounded of the armies of belligerent powers by a neutral power was, however praiseworthy on the score of humanity, not a very logical, safe, or economical method of procedure, and we ventured to express as much. The special correspondent of the *Standard* is apparently very much of the same way of thinking at the present time; for we find him repeating, but in stronger terms, views that we have ourselves advanced:—

"Colonel Loyd Lindsay, Dr. M'Cormack, and Dr. Leslie arrived here yesterday and returned this morning to Nisch. I hear that five surgeons of the Red Cross Society are coming up here. They had very much better have remained at Nisch, where there is a very great want of medical appliances, whereas in the hospital here there is everything that is required. In all cases of war the money of benevolent people would be infinitely better spent if forwarded to the principal medical officers of the contending armies, to purchase necessaries and comforts for the wounded. Every-

thing that lessens baggage, that diminishes responsibility, and sets every available man free for action increases an army's power of destruction, and the mistakenly kind people who are taking charge of Servian and Turkish wounded are increasing the slaying power of the Servian and Turkish armies. The principal medical officers of great armies are always men of culture, position, and intelligence, and, I repeat, the money of those who wish to alleviate the sufferings of the wounded in war would be vastly better spent if sent to the medical officers to be expended for the benefit of the wounded by themselves, or by a committee appointed by them. At any rate the travelling and other expenses of a large number of gentlemen and a few women would be saved, an item, I venture to remark, of very considerable importance."

THE RUSSIAN AMBULANCE CORPS IN SERVIA.

RECENT information from Servia gives an account of the distribution of some of the various ambulance corps sent from Russia to the seat of war. The several sanitary sections organised by the Red Cross Society are stated to be in full activity. The sanitary section organised by the Slav Committee in Moscow, is established at Alexinatz, and its ambulances worked in the environs of the city during the late fighting there. Two members of the staff of the Red Cross Society, Drs. Jankovsky and Auerbach, have been attached to this section. Dr. Dvoriachine's ambulance, organised at Novgorod, is stationed at Deligrad, under the charge of Dr. Borovkow. In the rear of the Servian forces, at Joanovatz, Dr. Botkine's ambulance corps is stationed, in huts built by the Red Cross Society. Here Dr. Rinek is in charge. The Kharkov sanitary section, under the direction of Dr. Dérévianko, is established at Paratchine; and at Tchverpria, in association with Dr. Dérévianko's corps, are forty beds, in huts, under the charge of Dr. Tanher, one of the medical staff of the Red Cross Society. Two hospitals, one containing seventy and the other eighty beds, have been established at Tagodine, and are maintained there by the Red Cross Society. The Dorpat medical staff sent into Servia is stationed at Svilainatz. At Belgrade hospital huts containing 150 beds have been erected, and were almost immediately occupied by wounded from the forces in the field. The incessant activity of the staffs of the different ambulance corps—delegates, medical men, and sisters of charity—is spoken of in high terms.

In connexion with the foregoing subject, we may note that the Russian Red Cross Society, in answer to an appeal from a committee of foreign consuls in Philippopolis, in aid of the victims of the atrocities committed in Bulgaria, has made a contribution of 20,000 roubles, and has appealed to the societies associated with it to seek assistance, specially for the widows and orphans in the devastated districts.

HOUSE DRAINAGE.

FROM the reply of Mr. Wakefield, clerk of the Metropolitan Board, to the Council of the Society of Arts with respect to the representations made by the latter as to the condition of house drains and their connexion with sewers, it is to be hoped that no delay or difficulty will be found during the next session of Parliament in obtaining the necessary amendments to the Local Management Acts of 1855 and 1862. An amendment that would confer on the sanitary authority of many of the old London parishes the power of sweeping away the old brick "channels," and replacing them with properly ventilated pipe-drains, would be a considerable boon to the inhabitants, and materially lessen the sickness and death-rate of the metropolis. Whilst the Society of Arts has the subject under consideration, we would suggest that under the same amendment further powers should be sought to deal with "upstairs" arrangements of the house. We allude more particularly to the upstairs closets and soil-pipes. The latter in London are generally in the centre of the house, and a defective or unventilated soil-pipe does not merely annoy the inmates of the house in which it is situate, but too often communicates its odours to the neighbouring house against whose party-wall it happens to be placed. As a case in point, we will mention the following:—A gentleman residing in a fashionable part of town found his bedroom suddenly pervaded by a most offensive odour. An inquiry was instituted to discover the cause, and after some time, it was found the party-wall in one corner of the room was damp, and here it was the smell was strongest. A visit to the next house showed that the damp proceeded from a watercloset recently erected in an adjacent bedroom for the convenience of an invalid. The closet had been so badly constructed, and the plumbing work was so scamped, that a greater part of its contents passed, not into the soil-pipe, but on to the floor! When we consider that outbreaks of diphtheria and erysipelas have been found repeatedly to recur in rooms close to an ill-ventilated closet, or down the side of which a leaky soil-pipe passed, and which ceased when these defects were discovered and remedied, we have additional reason for desiring to see more care bestowed on the construction and preservation of these "upstair arrangements." It is of little use to render our closets innocuous if our neighbours are allowed to keep a rotten, leaky soil-pipe fixed against our party-wall, which, from the porous and permeable materials of which it is too frequently composed, readily permits the escaped filth and odours to saturate it, and so pollute the air of our house which we have spared neither trouble nor expense to render pure and sweet. Where soil-pipes are in the interior of a house, they should be constructed of earthen pipes, which are not liable to be eaten away by chemical agencies, well cemented together, while between it and the neighbouring wall there should be interposed a thick layer of concrete.

SMALL-POX IN THE NORTH OF LONDON.

THE occurrence of fresh cases of this perfectly preventable and most horrible disease is the subject of anxious discussion by the authorities, amongst whom there is a varying amount of wisdom on the subject. The Islington Board of Guardians seem to rely chiefly on a negative measure for the abatement of the disease,—viz., that of not publishing handbills describing its prevalence, and urging preventive measures on the inhabitants. One guardian said, at a recent meeting, that 10,000 were slain by the "destroying angel," and 10,000 by handbills—or rather the panic created by them. It is new to us that sensible information on the disease is as deadly as the disease itself. The sooner the Board gets rid of this notion the better. Fear will not create one case of small-pox in the absence of the small-pox poison. The Vestry of Islington has sent a circular to each medical practitioner, requesting him to give early information of the occurrence of any case of small-pox, or other disease of an infectious character, occurring in his practice. This circular describes the facilities which now exist under the Poor Law Amendment Act (1876) for the prompt admission of patients not paupers into the hospitals of the Metropolitan Asylum Board, and it concludes by saying that information about disinfection and disinfectants themselves may be obtained free of charge at the vestry offices. It is well that the public should know that "disinfectants" are not of much more use than not publishing bills for conferring security for small-pox. It is, of course, right that disinfectants should be used. But there are two great measures so important as to render all others almost unimportant. The first of these is the isolation of the patient, and of all things

belonging to him; and the second is the prompt revaccination of all persons within his influence, who have not been once *successfully* vaccinated. We shall have these outbreaks of small-pox from time to time until revaccination becomes as common as vaccination, and until as much importance is attached to its being thoroughly and successfully done as is attached to the thoroughness of the first operation. We are informed by Mr. Wilkinson, in whose Poor-law practice the most of the cases have occurred, that the cases are not occurring in quite such rapid succession as at first. Of the 67 cases which he has seen, 21 occurred on or before 20th of September, 21 more up to the 24th, and 25 between the 24th and October 5th. Still the outbreak is at once serious and remarkable, and we hope shortly to publish an account of it by Mr. Wilkinson himself.

"THE TIMES" ON THE CORONER'S COURT.

The Times is giving its readers a sketch of "Coroners and Coroners' Juries." Already two lengthy articles have appeared. The purview is comprehensive, and would be strong in detail, but that it ignores some of the less prominent but important features of the law and practice attaching to these courts; for example, the power entrusted to juries for the correction of coroners when the latter are disposed to lax or improper procedure in regard to the reception or refusal of evidence, and in the matter of post-mortem examination. The stand-point of these articles is too exclusively professional, the legal bias is too obvious, and the long-robe flaunts gracelessly at every turn. The authorities cited are also few and not of the highest character, while the cases employed to illustrate the views of the writer scarcely support the propositions to which they are annexed. In one point the conclusion arrived at is that to which we directed attention on a recent occasion—"the association of all coroners with a central office, to which they might in all cases report." We suggested that the central authority should be the chief coroner of England—the Lord Chief Justice,—and that all proceedings in the district Courts of Record should be duly reported to his office. This is a better scheme than the creation of a Procurator Fiscal, endowed with the power of a grand inquisitor, holding secret court, which the leading journal at present seems inclined to recommend.

ORGANISATION OF THROMBUS.

AN interesting memoir on the organisation of thrombus has just been published by Dr. Paul Baumgarten, of Königsberg. His observations were made both on arteries and veins, to which two ligatures had been applied. He finds that both in the segment to which the double ligature has been applied, and in the parts of the vessel immediately above and below it, a new cell-formation takes place beneath the lining membrane. Nuclei first make their appearance beneath the endothelium by which they are invested; these increase in number, and speedily undergo a differentiation, those nearer the lumen of the tube becoming elongated and concentrically arranged, representing a new muscular coat (though they do not give the usual picric acid reaction), whilst those situated more externally send out processes and form an irregular network. The coagulum or thrombus retreats before the growth of these cells without presenting any indication of cell proliferation. Near the points where the ligatures are applied new vessels penetrate into the cell-growth, which are derived from the neighbouring connective tissue, and thus gradually a vascular connective-tissue growth is formed. M. Baumgarten attributes the formation of the new growth to the proliferation of the endothelial cells of the vessels; first, because in the early stages of the process all intermediat stages between the endothelial cells and the fibre-cells resembling muscle-cells may be seen; and, secondly, because he has been able to follow similar changes in a portion of vein confined between two ligatures, when the blood has been evacuated and replaced by some irritating fluid. It will hence be seen that he considers the self-organising power of the red clot to be *nil*. The only remains of it that are left after the lapse of some time are paticles of pigment scattered through the new growth.

POISONS AND POISONOUS DOSES.

IT is beyond question that the law regulating the sale of poisons requires revision, and needs, as a whole, to be placed on a better footing. At present it fails to deal with the facts of retail trade in drugs which are capable, in sufficient doses, of destroying life. For example, in a late number of the *Western Morning News* was a letter signed by a local chemist to the effect that he frequently supplies customers with "a pint or more of laudanum at a time." Laudanum is, by the Act, required to be labeled, but not *registered*. In many districts the practice of taking laudanum is common, and by long use, or abuse, of the drug, those who employ it have come to require large quantities. It might act as some check on this injurious custom if the names and addresses of persons habitually using the drug were registered, together with the quantity purchased. As a matter of fact we believe most of these laudanum-drinkers now carry on their practice with great if not perfect secrecy. The sale of *all* poisonous drugs should be recorded. The trouble would be small; the service rendered considerable. It is alleged that the Act is commonly evaded. Security might be taken against that evil by establishing a system of supervision, tracing the quantities of poisonous drugs in stock, after the manner pursued for the protection of the Revenue, and Excise. No difficulty thrown in the way of a reckless use of "poisons" can be considered a hardship.

THE MEDICAL SOCIETIES.

THE session of the Societies has already opened. On Wednesday last the Obstetrical Society resumed its monthly meetings in the rooms of the Royal Medical and Chirurgical Society in Berners-street. The other Societies follow suit, commencing with the Royal Medical and Chirurgical, which holds its first meeting on the 10th inst.; the Clinical meets on the 13th, the Medical on the 16th, the Pathological on the 17th, and the Medical Microscopical on the 20th. It is too early to speculate upon any changes that may be witnessed in these Societies during the coming year; but at many of them there will be new presidents elected, as the expiration of their biennial term of office will occur at the end of the present year.

At the Medical Society the Lettsomian Lectures will be delivered by Dr. Alfred Wiltshire upon "Vascular Rhythm as exemplified in Periodical Hæmorrhages, General and Local; and on the Treatment of Hæmorrhages from the Female Generative Organs." The annual oration will be delivered by Dr. Hughlings Jackson on May 7th.

THE MIDDLESEX HOSPITAL.

THE annual distribution of prizes to the successful students of this hospital took place on the conclusion of Dr. Evans's introductory lecture, Mr. A. H. Ross, chairman of the Weekly Board of the hospital, presiding. In his report the Dean (Mr. Andrew Clark) alluded to the high positions recently taken by Middlesex students in the examinations for the public services, one of them, Mr. Arthur Tomes, having gained the Herbert prize at Netley this year. The great loss which the hospital had sustained during the

past session in the death of Mr. Campbell De Morgan was feelingly mentioned by the lecturer, the dean, and the chairman; and in spite of some juvenile ill-timed attempts to make their presence known on the part of one or two youths who had apparently found their way into the theatre by mistake, the proceedings passed off satisfactorily. In the evening there was a large gathering of past and present students and friends of the hospital at the annual dinner at St. James's Hall, the chair being occupied by Mr. J. W. Hulke, F.R.S. Amongst the speakers to the toasts that followed were Mr. Ross, Dr. Greenhow, and Mr. Critchett. Mr. Nunn proposed the health of the gentlemen who had contributed largely to the success of the evening by their personal efforts, vocally and instrumentally—viz., Herr Ganz, Dr. F. T. Roberts, Dr. Lavies, and Mr. Anderson Critchett.

MANSLAUGHTER BY RUPTURE OF THE SPLEEN.

A CURIOUS medico-legal point was involved in a recent trial for manslaughter in Ceylon. A coolie, in consequence of alleged impertinence, was treated with some violence by the superintendent of a plantation, and died almost immediately from, as the post-mortem examination showed, rupture of the spleen. The man had had fever lately. The spleen was large and soft; it had ruptured, and the peritoneal cavity was full of blood. It was urged for the defence that the spleens of coolies sometimes rupture spontaneously on severe muscular exertion, that the exertion of running away, as the coolie did, might have ruptured his spleen, and that death therefore would not be the direct result of the action of the accused. Dr. Norman Chevers was quoted in support of the theory that the spleen might rupture under such circumstances, but it was discountenanced by the medical witnesses, and we think rightly. An accident so rare, and even doubtful, as such rupture of the spleen must be, cannot be allowed weight in the presence of evidence of direct violence. The Chief Justice ruled that, even if the diseased spleen would have caused the man's death sooner or later, the rupture was so distinctly the result of the violence, that the prisoner could hardly have been acquitted of the charge of at least accelerating the death of deceased, and thus of manslaughter. The jury found the prisoner guilty, and he was sentenced to eighteen months' imprisonment with hard labour.

CHILDREN IN THE STREETS.

MR. GEORGE CRUIKSHANK writes to *The Times* to enforce the need of special regulations in the matter of driving to protect children in the streets. We have already urged that suitable playgrounds should be provided at the public expense in the interests of public health and a vigorous healthy population. The grounds attached to Board schools, if more freely utilised for the local public, would do something, but much more is necessary. The evil of reckless driving is great, but no one who has driven frequently through London can fail to have experienced the difficulty of avoiding risks. Children playing in the streets are undoubtedly a nuisance, and it is even more embarrassing to keep clear of them when going slowly than at a moderate speed. They have a furtive way of dodging round objects, and a vehicle proceeding at a snail's pace offers a tempting opportunity for the display of juvenile agility against which the benevolent "whip" has need to be particularly on his guard. The only remedy for this evil of "street accidents," so far as children are concerned, is the provision of suitable playgrounds, and the prohibition of gutter amusements, or the practice of turning helpless infants into the streets to get rid of them, or sending them on errands involving perilous crossings and other avoidable risks.

ILLNESS AND RETURN OF PROFESSOR HUXLEY.

PROFESSOR HUXLEY delivered his last lecture in America, at the Chickering Hall, New York, on the 22nd ult., and started for home on the following morning, in the *Celtic* of the White Star line. Adverse winds were encountered with a strong head sea throughout the passage, which occupied ten days, Queenstown being reached on Tuesday last.

We regret to learn that the professor, who was accompanied by Mrs. Huxley, suffered severely during the voyage from symptoms analogous to those associated with the passage of a small gall-stone, but diagnosed as dependent upon spasm of the stomach and mucous catarrh of the duodenum.

The distinguished invalid received every attention from Dr. W. Neale, surgeon to the ship, and was fortunate in securing the further advice of Dr. Lauder Brunton, who was returning to London in the *Celtic* from the International Medical Congress, in Philadelphia. Professor Huxley was able to leave his cabin on Tuesday, so we trust that he will soon be sufficiently recovered to resume his valuable researches.

HEALTH OF DUBLIN: NOXIOUS VAPOURS.

AT a late meeting of the North-Western Association of Medical Officers of Health, held in Manchester, a report was read "On the Influence on the Public Health of Noxious Vapours and Gases." The information obtained from Dublin, the report mentioned, was interesting, as the City Analyst (Dr. Cameron) for Dublin entertained very decided opinions as to the detrimental influence exerted by noxious vapours, believing that they were a cause of part of the excessive mortality in that city, and affected injuriously the digestive and respiratory organs. Dr. Cameron was of opinion that all works evolving exhalations injurious to vegetation and health should be subjected to the same kind of supervision as that imposed on alkali works, and that copper-smelters and glass-makers should be compelled to condense, so far as practicable, the acid vapours which they now allow to escape into the air. As regards compensation for damage done to property, he advised that manufacturing districts should be formed under the surveillance of inspectors appointed by the Local Government Board, and that the injury done to farmers should be determined by a Government valuer, and levied as a rate on the manufacturers of the district in proportion to the deleterious gases which they allowed to escape.

SMALL-POX IN LONDON.

THE last weekly return of the Registrar-General shows that fifteen more fatal cases of small-pox were registered in London during the last seven days of September, against 16 and 11 in the two preceding weeks. Of these 15, 11 were recorded in North London, including 9 in Islington; 3 of the latter were registered in the Homerton Small-pox Hospital. Nine of the 15 fatal cases were certified as unvaccinated, 1 as vaccinated, and in the 5 other cases the medical certificates gave no information as to vaccination. All the 8 deaths from small-pox that occurred in the two Metropolitan Asylum District Small-pox Hospitals were unvaccinated cases, although the vaccinated patients under treatment were nearly as 5 to 1 unvaccinated. On the last day of September these two small-pox hospitals, having 204 beds, contained 128 patients, against 72, 95, and 101 in the three preceding weeks. At this rate of increase both hospitals will soon be filled. During the week ending 30th

September, 62 more cases were admitted, whereas in the two preceding weeks the numbers had been but 33 and 26 respectively; these 62 admissions included 45 vaccinated and 17 unvaccinated cases.

AN official report of a visit lately paid by Dr. Bridges to the Leavesden Schools, a copy of which has been presented to the St. Pancras guardians, renders it only too clear that a vast amount of mismanagement exists in the administration of the establishment. Dr. Bridges visited the schools on the 14th September. He found the infirmary in a very unsatisfactory state, one ward in particular being out of order. The medical arrangements were also the reverse of what they should be, there being no bed-cards to cases that had been in the wards a fortnight, while an extraordinary confusion reigned with regard to the supply of lotions to children with ophthalmia. There were in all forty-seven cases in the wards. At the dispensary the inspector found that the only medicine in use was phosphate of iron, in doses of two tablespoonsfuls for the older and one for the younger children. One case of measles had not been isolated. Moreover, from an examination of the books, it appeared to him that the attendance of the medical officer was insufficient. Finally, Dr. Bridges stated that the question of receiving fresh children could not be entertained until the defects he pointed out were remedied. The guardians have directed that the officers should each be served with a copy of the report, and requested to give an answer in writing.

AT a late meeting of the Port Sanitary Committee of the Corporation of London, a Report was presented by Mr. Harry Leach, medical officer of health. While reserving fuller consideration of the report, we may now cursorily glance through its contents. It appears that, in spite of the very hot weather experienced some time back, no epidemic occurred in the port, nor was there any special increase of diarrhœa noted. The state of all the school-ships was satisfactory. A large quantity of clothing belonging to seamen who had died abroad from infectious disease was disinfected. It is observed of the vessels visited and examined in the docks, that those coming from Guernsey, and from some of the north-eastern ports of the kingdom, require the most constant sanitary supervision. A special report on the condition of the canal barges was also presented, and a copy was ordered to be sent to the Local Government Board, as some legislation in this direction is contemplated next session. The nuisances existing between Woolwich and Gravesend are dealt with, and the means by which the danger from them may be obviated are pointed out to the riparian authorities.

THE inauguration meeting of the American Gynæcological Society was held at New York on September 14th, 15th, and 16th, under the presidency of Dr. Fordyce Barker. The Society embraces the representative men of all the great centres of activity. Admission is conditional on approved work. The choice of honorary members is also strict. At present only four have been elected—viz., Dr. Robert Barnes and Mr. Spencer Wells for England, Dr. McClintock for Ireland, and Mr. Thomas Keith for Scotland.

IN the last weekly returns of the officiating sanitary commissioner for the Punjab, 298 deaths are registered under the head of cholera—an increase on the mortality of the previous weeks. The disease was very fatal in the Murree-hill Sanatorium and in its environs, and also in eleven neighbouring villages. In Lahore, cholera-deaths occurred in eight newly infected places. Small-pox is decreasing in the province.

THE *Pall Mall Gazette* states that a medical staff has already been organised in connexion with the proposed exhibition to be held in Paris in 1878. It is to consist of a Physician-in-chief, who will take up his head-quarters in the Trocadero or the Champ de Mars as soon as the works begin, two assistant-physicians, and two male attendants. Any workman who may meet with an accident will thus find immediate medical assistance. Should he be completely disabled, he will receive from the Government half-wages for a year. If he meets his death while engaged on the works his widow or family can claim an indemnity of £24. If a workman should meet with an accident through drunkenness, he will receive free medical attention, but no pecuniary compensation, and if the injury should prove fatal, his widow will not be paid anything for the loss she may have sustained.

IT is tolerably widely known that diarrhœa has for a considerable period been prevalent and fatal in Leicester. Dr. Wm. Johnson, dealing with the subject in a pamphlet, a copy of which he has forwarded to us, ascribes the persistence of the disease mainly to the poisoned subsoil of the town, through its sewers being choked up from want of fall, and their inefficiency in capacity, while the noxious emanations given off have a most disastrous effect. The drainage is described as "atrociously bad," and the town generally "in a worse condition than any other large town in Britain." The following statement of Dr. Johnson certainly deserves the attention of the urban authority:—That of the 299 fatal cases of diarrhœa (amongst children up to five years of age) that occurred in the year 1875 nearly 90 per cent. took place in districts drained by the sewers which he condemns.

THE managers of the South Metropolitan Schools at Sutton, where the pauper children of Greenwich, Woolwich, Lewisham, Camberwell, &c., are brought up and educated, have purchased the large house known as the Pier Hotel, Herne Bay, for use as a branch establishment, where children suffering from ophthalmia will in future be sent for treatment. The managers have shown much judgment in selecting a building available at once for the purposes of a sanatorium and a school. The Pier Hotel—for some time, we believe, uninhabited—is a well-built structure, having a large sea front, and seems altogether extremely well adapted to the requirements of the managers. As an hotel it has long been a failure, but it is somewhat strange that its adaptability for a sanatorium has been so long overlooked.

THE medical officer of health for Salford, in describing the condition of a quarter of his district somewhat severely visited by an epidemic of measles, states that there are a large number of man-holes in the narrow streets by which the locality is intersected, which tend to diffuse offensive sewer gases; the air-space is not sufficient for their oxidation and destruction, and hence they find their way into the houses, to the peril of the tenants. The medical officer also, in the course of his inspection, could not but observe how likely to spread disease is the reprehensible habit existing among the poor of living almost as much in the houses of their neighbours as in their own, thus scattering infection from place to place. In some respects, however, the sanitary progress made in Salford is encouraging.

MR. W. WILLIAMS, secretary to the *Chichester* and *Arethusa* training-ships, writes to us (with reference to the annotation that appeared in THE LANCET of the 23rd ult.) that Dr. C. H. C. Huddart is the medical officer of these ships, and that a professional visit is paid by him to both establishments every day.

THE Rotherham sanitary authority having applied to the Local Government Board for power to borrow money to execute sewage works in the village of Whiston, an inspector, Mr. Morgan, C.E., has held an inquiry in the locality. Zymotic diseases have been very prevalent in Whiston for some time, and there is very strong evidence to show that they depend on defective drainage. A brook runs through the centre of the village, receiving all the sewage of the district; while contiguous springs of water, originally pure, are absolutely undrinkable from contamination. After some discussion, Mr. Morgan adjourned the inquiry for a month.

THE twenty-fourth annual session of the American Pharmaceutical Association was opened at Philadelphia on the 12th September, in the rooms of the College of Pharmacy. About 130 members were present, including delegates from thirty-one different associations of the United States and Canada. The President, in his opening address, spoke with pride of the present condition of the Association, which, he said, will be a lasting memorial to the men who were instrumental in instituting it. A committee was appointed to examine and report on the chemical and pharmaceutical preparations displayed at the Centennial Exhibition.

THE number of subjects awaiting dissection at the various metropolitan schools is, so far, very satisfactory, and is a decided improvement on the number at the commencement of the past winter sessions. We hope that this fair promise will be fully maintained, so that neither teachers nor students will have any ground for attributing their want of success at the April examinations to a scanty supply, as has been the case in the last three or four years.

THE King's College Old Students' Dinner took place at King's College on October 2nd, 1876. In addition to the guests, nearly 150 old King's men were present; indeed, every year from 1835 to 1876 was represented. A very pleasant evening was spent under the chairmanship of Dr. L. S. Beale, the newly-appointed Professor of Medicine.

ON Tuesday last the Bristol Royal Infirmary was reopened by the Bishop of Gloucester and Bristol, after having been closed twelve months. The building has been greatly improved, a sum of £15,000 having been expended on its renovation. A short service was held in the chapel, and Bishop Ellicott delivered a suitable address.

IT is stated that of the 340 candidates who were admitted to the preliminary examination for the diploma of Fellow and Member of the Royal College of Surgeons on the 12th, 13th, and 14th September last, only 72 were unsuccessful.

DR. BLAXALL, medical inspector of the Local Government Board, has lately been at Redruth investigating certain complaints made by the inhabitants respecting the drainage and sewerage of the town.

WE are glad to learn that the British Medical Benevolent Fund has received a sum of £500 free of legacy duty, bequeathed by the late Sir James L. Bardsley, of Manchester.

A SEVERE epidemic of scarlet fever prevails in the Ross Union, and it has been decided to erect a temporary hospital for the reception of persons suffering from the disease.

WE are happy to be able to state that Dr. Arthur Farre has now fairly recovered from the result of his accident.

REPORT
OF
The Lancet Commission
ON
LUNATIC ASYLUMS.

BETHNAL HOUSE.

THIS is the third in point of size of the "Metropolitan Licensed Houses" receiving paupers, but it is at present tenanted by a larger number of patients supported out of the public rates than will be found located in either of the other establishments on a similar footing. At Camberwell House there were 136 paupers in a total of 406. At Bethnal House the return for Jan. 1st, 1876, shows 250 paupers against a total of 380.

Especial interest attaches to this institution. To the gross neglect and inhumanity with which the insane were treated within its walls just fifty years ago we owe the reforms which have placed the treatment of lunatics on a satisfactory basis and invoked for their protection the vigilant guardianship of the law. In 1827 Mr. Gordon described the condition of matters at the "White House" in language which stirred the sympathies of the Commons and the country, and, supported by the energetic philanthropy of the present Earl of Shaftesbury, then Lord Ashley, led to the passing of the Act of 1828, "to constitute and amend the several Acts respecting county lunatic asylums, to facilitate the erection of county lunatic asylums, and to improve the treatment of pauper and criminal lunatics." The following passages are from the speech of Mr. R. Gordon, the member for Cricklade, delivered in the House June 13th, 1827, as reported in Hansard:—

"He particularly referred to the dreadful state of misery in which the pauper lunatics of the parishes of Mary-la-bonne and St. George were situated. When the overseers of the parish of St. George visited Dr. Warburton's asylum, they found, in a room eighteen feet long, sixteen cribs, with a patient in each crib, some of them chained and fastened down, and most of them in a state of great wretchedness. On one occasion, a visitor having gone there and reported that there was nothing objectionable in what he had seen, he went again the next day, and discovered five rooms in which the patients were in a most horrid state of misery. This he found out, although when he was there the day before he was informed that he had seen everything. The unfortunate persons placed in these cribs were kept there from Saturday until Monday, their food being administered to them while in them. ..... In this asylum there were two hundred patients, and only two male and two female attendants on all, the business of the house being done by assistant patients. ..... The number of recoveries of patients in the vicinity of London was very disproportionate to the number of recoveries in other places, where there were proper lunatic asylums. For instance, in Norfolk and Gloucester one-half of the patients recovered; whereas *in Middlesex not one-tenth ever sufficiently recovered to be discharged.*"

It is a striking proof of the good service accomplished by the Commission appointed subsequent to this exposure and in pursuance of the reforms instituted by Parliament, that the state of matters is so widely different to-day. Instead of "one-tenth," 31·88 per cent. per annum of the "admissions" recover, the same proportion for "Metropolitan Licensed Houses" generally, being, in pauper cases only, 37·67. The treatment received by the insane patients in Bethnal House is not less changed than the results attained. In place of neglect, there is care, cruel indifference has ceased, and evident solicitude for the comfort and welfare of all inmates, private and pauper alike, inspires the policy and controls the management.

Bethnal House comprises "the White House," with numerous additions. The structure is exceedingly irregular, and covers a good deal of ground, with airing courts interspersed between the blocks. For an establishment so constructed,

It is commodious, and presents few features which challenge criticism. Some of the rooms are low, but speaking generally, the air space is ample, and the superficial area sufficient. The paupers are kept apart from the private patients, but in other respects there is little obvious difference in their treatment—beyond that, the parish cases sleep on flock beds, while those which are paid for by their friends enjoy the luxury of feathers, and for the former there is a "pudding" day, once a week, probably rather to the advantage of the patients than against their interests, although it would be better if the pudding were replaced by fish. The attendance seems efficient, and the dormitories are so arranged that in every apartment containing several beds an officer sleeps. The practice of placing a single patient in a room with an attendant is, as we have elsewhere urged, perilous. When two, three, or more patients are associated, the presence of a nurse in the dormitory may obviate the need of frequent disturbance by the night-watch, but we think *every* room should be visited at suitable intervals. It is the locking and unlocking of doors which proves a fruitful source of annoyance, not the quiet patrol of a judicious inspector. The proportion of attendants to patients is about one to fifteen, all told.

The accommodation, as we have remarked, seems sufficient. The furniture is fairly good. A more liberal supply of brushes and combs in the sleeping-rooms would be desirable; and such little matters as the provision of drinking-water in each dormitory, prompt and better service at the dinner-tables, with an endeavour to make the function of feeding more orderly and decorous, might be urged upon the attention of the management; but a close review of the establishment leaves a very favourable impression, and certainly discovers no occasion for complaint. In respect to one particular, of pre-eminent significance, it is pleasant to be able to speak very warmly. Although the house is old, in some parts of great age, and the inmates are generally of a class requiring especial attention, we did not observe a close atmosphere or an offensive odour throughout the establishment. Indeed, the cleanliness is remarkable, and reflects credit on the administration and the service. Nothing speaks more strongly for the general conduct of an institution for the insane than this characteristic. There was no trace of that anomalous vapour which pervades asylums even in open districts, and is too often set down to a peculiar emanation from the bodies of lunatics. As a matter of fact, we believe this "smell" is a convenient myth that covers a multitude of sins in the matter of insufficient washing and general attention to the persons and clothing of the inmates. The linen is imperfectly washed, and dried at a high temperature, which burns the foul vapours given off, and even the "clean" clothing is perceptibly contaminated. We have bestowed some attention on the matter throughout this inquiry, and it is abundantly evident that when attendants are vigilant and the laundry arrangements well cared for, *the foul linen being kept carefully apart*, the traditional hypothesis is not supported.

Regarding the establishment as a whole, its efficiency as a lower middle-class asylum admits of no question. The health of the inmates is good. They enjoy a large amount of liberty, and are not irritated by needless or irksome discipline. The system of walks and rides beyond the grounds with attendants and on *parole* is in full use, and, so far as we could infer from the answers supplied to questions asked, and by observation, it is judiciously applied. The only point in respect of which we were impressed unpleasantly was an apparent lack of occupation either in work or play. Too many of the patients sat, or stood, about without any great effort being made to engage their attention. The physician of Bethnal House is so experienced and practical a "psychologist"—we use the term unwillingly and for want of a better—that he has doubtless noticed the habit to which we allude, and may fairly be urged to mend it. He has done good service in pointing out how some of the worst forms of insanity spring from a vice which is the offspring of idleness. It is, of course, exceedingly difficult to deal with the insane. There is no power to *make* them work—though the lack of such a power is, perhaps, a greater evil than its abuse would be. Nevertheless listless brooding is one of the most mischievous propensities of the insane, and it would be highly beneficial if some impulse of work or play could be stirred in this institution. The system of rewarding patients for their labour is in force, and, we believe, every ordinary incentive to useful employment is adopted; but if the inmates will not work then they should be urged to play. We do not wish to imply that there is more inaction here than elsewhere, but, amid so much that is excellent, what seems to be a defect stands out with exceptional prominence, and, speaking freely, as we feel bound to speak, it may not be in vain to urge that the only point which struck us adversely is one that deserves and would reward attention.

Restraint is used for surgical purposes, and occasionally at night, for the protection of the suicidal. We think the latter recourse is to be regretted. There is, however, only one way of obviating the use of mechanical appliances, and that necessitates a considerable outlay, less easy to meet in a private asylum, unless the patients pay remarkably well, than in a public institution—viz., an increase in the number of attendants. We have elsewhere strongly insisted that in all county and borough asylums, and institutions claiming the rank of hospitals, the question of cost ought to be put wholly on one side, and the requirement fulfilled at any expenditure. It is difficult to apply the same argument to the case of a private house, where patients are received at rates barely above those of an ordinary boarding-house. For routine purposes the attendance at Bethnal House is apparently adequate. That it is *not* sufficient to prevent the occasional use of restraints is equally obvious. The discipline is so good and the general management so effective, that no difficulty is likely to occur except in regard to special cases; but in regard to these, the resource should certainly be an increase in the staff of attendants rather than the use of measures shown to be ineffectual, and on many grounds open to objection, as provocative of mental mischief. The general principles of the curative system adopted are intelligent, and the use of approved remedies and methods of grappling with the various forms of disease is energetic and advanced. A patient at this house is not only well cared for, but an honest and able effort is made for his recovery. From the medical standpoint not less than the humane, the treatment is sound, and, guaged by results, it is at least as successful as that pursued elsewhere.

Our thanks are due to Dr. Millar for his courtesy.

THE FIFTH ANNUAL REPORT OF THE LOCAL GOVERNMENT BOARD.—PART I.

THE contents of this Report, which in the present case occupy a bulky volume of about 500 pages, have an increasing interest year by year for all those engaged in prevention of disease and maintenance of health. The administration of the laws relating to the relief of the poor, and those affecting local government and the public health, here obtain an equal share of attention, and it requires no prophet to foretell, even after a very casual glance at these pages, that the latter subject will in a brief space of time overlap the former, and claim the lion's share of space and importance.

The first section of the Report, relating to Poor-law relief, shows for 1875 a comparative increase of expenditure in the counties of Kent, Surrey, Monmouth, Warwick, Stafford, South Wales, and Cornwall, and a decrease as regards all other counties in England and Wales. The total decrease has been almost uninterruptedly continuous, and is lower than in any year since 1868, "chiefly due" (according to the President's report) "to the exertions which have been made by the guardians throughout the country to improve the administration of the law." The system of out-door relief has been specially dealt with in Manchester, with a result of reducing the number dealt with by nearly cent. per cent., and the out-door relief system of the metropolis has also undergone a large though not so marked an improvement.

The provisions of the Metropolitan Poor Act, 1867, relating to separate accommodation for sick in-door patients, continue to be utilised. Of the thirty unions and parishes dealt with, six are in sick asylum districts, thirteen have separate infirmaries open, and orders have been issued for their management under medical administration. In three cases separate infirmaries have been designed or are in

course of erection, in two cases proposals have been made by the Board for the introduction of the separate infirmary system, and there are six unions or parishes in which the sick are still retained in mixed workhouses.

As regards the work done in connexion with the Metropolitan Asylums Board, now a very important sanitary body, it is recorded that the future superintendence of the school-ship *Exmouth* (successor to the *Goliath*) will be in their hands, and that plans have been submitted by them and officially sanctioned for the enlargement of the existing imbecile asylums at Leaveseden and Caterham, so as to give a total accommodation to 2000 persons. A plan has been also approved for the erection of an asylum for imbecile children near Dartford, and of administrative buildings at Fulham and Deptford, for the accommodation, if required, of fever and small-pox cases. The occupation of the Homerton Hospital of cases of scarlet fever in 1874 and 1875 is also briefly referred to.

We alluded in a fragmentary way last week to the dispensary system, which very properly takes a conspicuous position in Mr. Sclater-Booth's report. There are now in operation in the metropolitan district forty-seven of these useful establishments. The cost of erection and maintenance is found to be extremely small, the limiting conditions being the necessity of occupying the full time of a dispenser, and so of attaching to the same dispensary a sufficient number of medical districts, and also of insuring that the dispensary, from its situation, is easily accessible both to patients and medical officers. In practice it has been found undesirable to establish dispensaries when the distance from the patients' houses would be more than a mile, due consideration being also had, in each case, to the convenience of the medical officer. We shall advert to this important subject in criticising the Report, but may here say that the system has undoubtedly proved a great success.

The number of lunatics, imbeciles, and idiots chargeable on the poor-rates continues, as usual, to increase; the total number being 54,571 in 1875, as compared with 52,881 in the previous year.

The rest of this part of the Report has, comparatively speaking, little professional interest. The emigration at the cost of the poor-rate was on a very small scale, 108 persons only having received emigration orders, at a total cost of £378, and these were sent to Canada, New Zealand, or Australia. During the year under consideration, sixteen medical officers were dismissed or required to resign, and six were superannuated. A general order was issued last year to assimilate Article 178 of the General Consolidated Order of 1847 with the Medical Act of 1858, so as to establish distinctly the claim of a medical officer to amputation fees.

We must reserve the second and more important section of the Report for a future article.

PROPOSED SANITARY IMPROVEMENTS AT CROYDON.

WE have already (THE LANCET, 23rd Sept.) briefly noticed the report of the special committee, appointed 16th May, to consider the recommendations contained in Dr. Buchanan's report to the Local Government Board on the epidemic of enteric fever at Croydon in 1875. The duties of the committee have been applied to a consideration of the recommendations set forth on p. 14 of Dr. Buchanan's report, and not to the general matter of the report itself. Previous to Dr. Buchanan's report the sanitary board had taken steps to improve the health condition of the town by a more efficient ventilation of the sewers; by more efficient flushing, and, during the epidemic, a daily disinfection of the sewers; by the removal of the flushing-valves from the water-mains in those cases in which they made a direct and continuous communication between the water-services and the sewers, and by reinstating them without that dangerous union; by inserting flushing stations where they appeared to be most required; by casing the old well so as to prevent all chance of leakage of surface-water; by the insertion of air-valves into the water-mains, to relieve the pressure in them whenever an intermission of constant supply by chance occurs; and also by sinking an additional well and providing more pumping power in order to secure a constant supply of water for the future. In addition to these improvements Dr. Buchanan recommended that certain others should be carried out. Some of these the board have already undertaken. For instance, proceedings have been taken against owners of property by the board to enforce the separation of the water services from direct communication with the sewers, and they have been so far successful as to obtain a judicial decision in their favour. The board also have determined to add greatly to the number of street-ventilators, and propose to borrow £3300 for the purpose of providing 185 new man-holes, 50 new ventilators, and 75 man-hole tops. But the most important part of the whole report is that which deals with Dr. Buchanan's recommendation to replace the defective sewers by others more equal to their work. The board had already determined to construct a main sewer from near St. John's Church to the north end of the Brighton-road, at an expense of £6700. But the evidence that has been before them has convinced the committee that a number of the sewers are defective and require to be relaid, and with a greater fall. The committee therefore recommend that £12,000 be spent for this purpose, of which £4250 is to be spent in the enlargement of the outfall. It is to be hoped that if this recommendation is carried out the sewage which at present collects in the sewers in the lower portion of the town, especially during seasons of heavy rainfall, will pass off rapidly and relieve the sewers in the upper portion of a dangerous pressure, and diminish the escape of sewer-gases throughout the town generally. The report concludes with a graceful acknowledgment of the valuable services rendered by Dr. Philpot, the medical officer of health, during the prevalence of the epidemic, an acknowledgment which all acquainted with the duties performed by him during that crisis will be ready to endorse. The sanitary authority of Croydon are to be congratulated on the clearness and evident sincerity of this report of their committee, and we hope shortly to be able further to congratulate them on the successful completion of all the recommendations it contains. With new, well constructed, and amply ventilated sewers, and with a naturally good water-supply guarded against chance contamination during delivery, Croydon ought in time to become a model suburb, and a pattern to its neighbours.

THE INTERNATIONAL MEDICAL CONGRESS, PHILADELPHIA.

THE International Medical Congress at Philadelphia has proved a success far beyond the expectations of its most sanguine promoters, and deserves, therefore, a far fuller notice in our columns than space will permit.

The cosmopolitan character of the representation at the Congress testified better than words could express the world-wide interest which it excited. Disputes, so common in medical societies, were conspicuous by their absence in the deliberations of this organisation, whose very constitution was such as to ensure its members being above the display of any petty jealousy. The most critical would have found it difficult to take exception to the excellent taste and hearty good-fellowship manifested in the address of welcome by Professor Samuel Gross, M.D., D.C.L. Oxon.

The address on Medicine contained many facts of great historical interest, and whilst Professor Flint paid flattering tribute to the high place British medical literature had taken, he did not fail to do ample justice to the part played by America in the progress of medicine during the past century.

The address on Hygiene and Preventive Medicine was delivered by Dr. H. Bowditch, who limited the age of progress in this department of medicine to the days subsequent to 1868. The orator awarded the palm to England, and quoting the replies received to interrogatories, eliciting the present condition of sanitary progress, addressed to one hundred and sixty-seven men of intelligence, residing in thirty-eight States and nine territories, and extending over twenty-five degrees of latitude and forty-seven of longi-

tude, showed how very generally the importance of sanitary medicine is understood in the United States, and how indifferent both the local and central governing bodies are to the obligations it should impose upon them. The annual deaths in the United States of America from preventable disease were estimated at 200,000. The importance of Dr. Bowditch's communication was so appreciated by the Congress that a resolution was passed ordering that a copy be furnished to the governors of the various States, for transmission to the Legislatures. A similar course was authorised with regard to the Provinces and Government of Canada.

In the address on Medical Chemistry and Toxicology, as also in that on Surgery, little was omitted which could fail to cast credit upon the American workers in these departments. Complimentary reference was made to the work of Louis Sayre. We could have wished that in connexion therewith due credit had been accorded to the late Dr. March for his share in the discovery of the true pathology of hip-joint disease, and to Drs. Davis and Taylor for their magnificent mechanical achievements for the treatment of that malady in the vertical as well as horizontal position.

The address on Medical Jurisprudence contained some severe strictures upon the present administration and conduct of the law in medico-legal cases, and forcibly reminded one of the vast field that exists for improvement in a similar direction in the "old country" as well as in the United States of America.

The addresses on Medical Biography, Obstetrics, Medical Literature, and on Medical Education, must have been highly gratifying to the national vanity, and on the occasion of the centennial anniversary were perhaps natural, though it is probable that, had the opportunity offered, most of the foreign delegates would have elected to spend the time occupied in hearing these addresses, which they could read subsequently, in the practical work of the sections, or even in visiting the Centennial Exhibition.

The address on Mental Hygiene, by Dr. John P. Gray, formed a grand contrast to those last mentioned, and, when published, will interest readers of all nationalities. It was written in a comprehensive manner, and dealt with facts in a most liberal spirit. No abstract would do justice to the matter which this address covered.

An important, entertaining, and interesting lecture "On Army Medical Work," was given by Dr. J. T. Woodward, and a report by Dr. John M. Woodworth upon the general subject of Quarantine, reference to which will be found in another column.

NORTH-WESTERN ASSOCIATION OF MEDICAL OFFICERS OF HEALTH.

THE quarterly meeting of the North-Western Association of Medical Officers of Health was held last week, under the presidency of Dr. Sutton, of Oldham. The sub-committee appointed at the last meeting to consider the question of the tenure of office by medical officers of health, reported that such tenure was at present in a very unsatisfactory condition, by reason of the short periods for which they were appointed, of the uncertainty of the office, the mode of election, the possibility of arbitrary dismissal, and the injury resulting to the cause of sanitary science and the public health from the diminished interest taken because of the uncertainty of the office. The committee contended that while the appointment of medical officers of health should, as heretofore, be made by the local sanitary authority, in no case could a dismissal be effected without the sanction of the Local Government Board. They also suggested that the assistance of kindred associations should be sought in laying their opinions before the Central Board.—Dr. Deville, of Harrogate, who was warmly received, stated that the Local Government Board refused to confirm his dismissal, and expressed a hope that an amicable arrangement between himself and the Harrogate authority was yet possible.—Dr. Vacher, of Birkenhead, then read the supplementary report of the Association on the number, extent, and nature of the chemical and allied works in or in the vicinity of certain districts referred to in the reports on the effects, upon human life and health, of the vapours and gases emitted from chemical works.—Dr. Wilson, of Rochdale, read a paper on Medical Inspection of Schools, in which he urged periodical inspection as necessary to prevent the spread of infectious disease.—The Chairman, who had prepared a paper on "Infantile Mortality," in consequence of its length did not read it, but promised to print it, and send a copy to each member. An interesting meeting was brought to a close with a vote of thanks to the chairman.

ANÆSTHESIA IN OPERATIONS ON THE EYE.

To the Editor of THE LANCET.

SIR,—Dr. Bell's case of cardiac syncope from the inhalation of bichloride of methylene, immediately following the operation of excision of the globe, is one of very great interest to operating surgeons, as this operation is frequently performed by others than specialists.

When resident surgeon to the Birmingham and Midland Eye Hospital, I in several instances observed syncope follow the division of the optic nerve, and I am inclined to think that it is of reflex origin. In the cases that I have carefully watched, the patients have taken the chloroform quietly and well, both breathing and colour of face being natural; then, the nerve being divided, immediate stoppage of heart and breathing has ensued, accompanied with deathly pallor of the face. In a few instances there has been more bleeding from the ophthalmic artery than is usual, but it is scarcely probable that hæmorrhage from so small a vessel, even in close proximity to the brain, can cause this disaster; and, moreover, there has usually been little or no bleeding, the syncope instantaneously following the division of the nerve.

The last case I witnessed was at the York County Hospital, on 27th May, 1873, and I was then house-surgeon there. The subject was a healthy lad of eleven; and he was carefully prepared for the anæsthetic (chloroform), breakfasting at eight o'clock on bread and milk, having a little strong beef-tea at eleven, and twenty minutes before the operation (half-past ten) one tablespoonful of brandy with two of water. He breathed the chloroform quickly, and in three minutes, without any struggling, became insensible, and the operation was commenced. It took longer than usual, owing to a symblepharon interfering with the retention of the speculum, but there was no sign of anything being amiss till the optic nerve was divided, when *immediately* the face became pale, and both heart and lungs ceased action. I turned him over on to the left side, and exerted firm pressure beneath the heart; cold water, too, was dashed in the face. There was no response for about two minutes, when a faint gasp ensued, and the face became livid and the jugular veins distended. I now seized the tongue with my fingers and drew it out, and was rewarded by two or three faint inspirations; and I could now feel the heart fluttering with my hand, which was keeping up intermittent pressure. I then drew forward the tongue with artery forceps, and continued the pressure on the cardiac region till the pulse showed the case to be out of danger. Whilst these efforts were being made an enema of brandy (one ounce) was given by the nurse. The amount of chloroform placed in the inhaler, in two separate portions, was one drachm, and the whole of this was not inhaled. Since the occurrence of this case I have administered ether for the excision of the globe, and as yet have not observed syncope follow the division of the nerve.

I am Sir, yours &c.,

Leicester, Oct. 2nd, 1876. FRANK H. HODGES.

GLASGOW.

(From our own Correspondent.)

CONSIDERABLE interest is attached to the approaching winter session in Glasgow, as there will be three distinct schools of medicine, two of which will be in active opposition to one another. It is to be hoped that the number of students may increase in proportion to the expectations of the teachers, otherwise disappointment will be experienced. The University has, it is believed, handsomely agreed to

recognise all extra-mural teachers. Students desirous of graduating will now possess a boon the want of which was keenly felt for many years, and which was dwelt on in a letter published in November last.

The annual meeting of the Faculty—which, by the way, was more numerously attended than on any previous occasion—was held on the 3rd of October. Several important changes have long been under the consideration of the council in reference to the examination. A scheme was devised by them, which at the meeting was carried into effect. Among the chosen clinical examiners, I am happy to notice that those elected are taken from both hospitals.

It is currently rumoured that the appointment to the chair of Physiology has been fixed, and although I have this on very good authority, I mention no names other than that the Professor has not been taken from Glasgow.

For the first time in the records of the Royal Infirmary, a case of hydrophobia was received for treatment last week. At the same time it is well to state that differences of opinion existed as to its actual nature; nevertheless, the man died.

It was considered probable that Dr. Gairdner would, in all likelihood, be inclined to succeed Dr. Laycock. He, however, seems comfortable in this Western city, and thus will not add to the sum of the intellect of the Eastern capital.

The demolition of the rookeries, consequent on the city improvement scheme with other causes, has had a marked effect on the mortality of Glasgow, for last week it was only 20 per 1000. Mr. Cross, when here, justly complimented the municipality on the comprehensiveness and energy of their proceedings.

Glasgow, Oct. 4th.

Obituary.

JOHN MACBETH, M.A., M.D.,
BRIXTON.

DURING the past week there occurred at Ramsgate the death of an accomplished junior member of the medical profession, and everyone who had the slightest acquaintance with Dr. John Macbeth will lament the great loss the profession and society generally have sustained in his early death.

Dr. John Macbeth received his early education in the village school of Aldgernaig, situated on the banks of the river Garry. This romantic little village lies at the opening to the vale of Athole, the beauty of which is so truly described by her Majesty in her journal as "nature in perfection." From thence he went to the University of Edinburgh, where he carried off gold medals in the various departments in the Art classes, until at last he was successful in securing the Baxter Scholarship, on which occasion he graduated as Master of Arts with honours.

At this period of his life he was for some time undecided what course to adopt or profession to choose for his future study, and the writer was partly instrumental in influencing him to decide in favour of the medical rather than that of the Bar, being schoolboys together. For his great success in his medical classes, suffice it to say that he finished what may be termed his second curriculum with so much credit to himself that the examiners agreed to pass him with the highest honours, both for his M.B. and M.D. degrees, the most distinguished mark of pre-eminence the University bestows.

Dr. Macbeth acted for some time afterwards as senior house-surgeon to the Birmingham Lying-in Hospital; from thence he entered into partnership with a gentleman at Brixton. Only a few months later his partner died, and the whole practice fell into his own hands. He now discovered that he was suffering from some malignant growth in his neck, which ended his life last week. He was buried at his own special request in the churchyard of Old Blair, not far from his birthplace. Dr. Macbeth will long be remembered, by those who knew him best, as a young man of great promise, who, from his superior qualifications, seemed destined to arrive at some distinction in his profession. He was of a genial disposition, and well worthy of imitation for strict moral and exemplary conduct.

EDWIN BARTLEET, F.R.C.S.

THE death of Mr. Edwin Bartleet occurred suddenly, while he was on a visit to his daughter, who resided in London, and probably arose from cardiac degeneration. Though Mr. Bartleet's was not a very eventful career, he was widely known and appreciated in and outside Birmingham. No one was more highly thought of, or more deservedly popular with the public and with the members of the medical profession in that town, during the forty years that he practised there. His medical career commenced with an apprenticeship to the late Mr. Samuel Partridge, whom he afterwards joined in partnership. He attended the practice of St. Bartholomew's Hospital, and was at one time offered a demonstratorship of anatomy by Mr. Stanley. On his return to Birmingham he was elected one of the surgeons of the Eye Hospital, and this appointment he held for some years, but relinquished it in consequence of the increasing claims of a very extensive and high-class general practice. He retired some ten years ago, and for a time lived at Campden, in Gloucestershire, where he was much respected, and where he efficiently performed the duties of J.P. He left the country and returned to Birmingham a few years ago, and up to the age of seventy-four, when he died, was vigorous, kindly, and generous; ever ready to lend a helping hand to any less fortunate professional brother, or to do anything in his power to elevate the profession he so much loved and honoured.

ROBERT NORTON, M.D., M.R.C.P.

IT is with much regret that we announce the death of Dr. Robert Norton, for many years chairman of the Court of Examiners of the Apothecaries' Society. His loss will be deeply lamented by numerous friends and professional colleagues. In early life the subject of our memoir was apprenticed to Mr. Wheeler of St. Bartholomew's Hospital, and was a favoured pupil and house-surgeon of Abernethy, with whom his friendship ceased only with the great surgeon's death. Dr. Norton commenced professional life in London, and soon gained a lucrative practice. Ill health however, ascribable in the first instance to a post-mortem wound, compelled him to relinquish the active duties of his calling; and he travelled for some time as medical attendant to the Earl of Sefton and his family. Afterwards he settled for some time in Uxbridge, where, without neglecting his practice, he was enabled to obtain recreation and exercise, being well known in the hunting-field.

In 1840 he again settled in London, and soon was appointed member of the Court of Examiners of the Apothecaries' Society. He did not now seek much work, but, taking the membership of the College of Physicians, contented himself with a small consulting practice in a western suburb, where he secured an enduring reputation. He was an active and valued member of the Court of Examiners in Blackfriars for the long period of thirty-five years, performing the duties devolving upon him with zeal and devotion.

The large amount of good done by the Society at this time in furthering the cause of medical education was universally recognised and acknowledged. During his prolonged tenure of office, he was scarcely ever absent from his post, and was held in the highest esteem by his co-workers.

Dr. Norton died on the 20th of September of acute pleurisy, after a few days' illness, in the seventy-fourth year of his age. Of his private character and worth it does not become us to say much, but they were such as graced and adorned the profession of his choice.

An owner of house property in the Altrincham Union has been successfully prosecuted under the Public Health Act for neglecting to put sixteen houses, situated in Knutsford, in a good sanitary condition. Dr. Fraser and Mr. McKenzie deposed to the existence of sundry grave defects; among others, that the closets were in immediate contiguity to the eating rooms, and that there was no room for fresh air to come in. The defence mainly relied on the contention that the witnesses who had spoken were "interested parties." The magistrate, however, held that a nuisance had been proved, and ordered it to be abated within a month.

Medical News.

APOTHECARIES' HALL.—The following gentleman passed his examination in the Science and Practice of Medicine and received a certificate to practise on Sept. 28th:—

John Gabe, Poplar Hospital.

The following gentlemen also on the same day passed the Primary Professional Examination:—

William Wilfrid Webb, Charing-cross Hospital; Henry Palmer Welchman, Birmingham Hospital; John M'Dougall Stewart and Thomas Jackson, Middlesex Hospital; Fredk. William Wiles, London Hospital; William Saunders, University College.

At the Preliminary Examination in Arts held at the Hall on Sept. 29th and 30th, 91 candidates presented themselves, of whom 29 were rejected, and the following 62 passed and received certificates of proficiency in General Education:—

FIRST CLASS (in order of merit).—1. L. Stokes. 2. R. S. Batson, J. A. Liebmann, and F. W. Nicholson. 5. J. Parrott, J. H. Spry, and W. H. Weston. 8. A. J. Stiles, and J. Walpole. 10. A. de Prenderville, H. S. W. Hall, S. Gordon Smith, and J. Whelpton. 14. R. J. Allan and T. W. L. Beales. 16. W. E. Bradley, H. V. Knaggs, and J. F. Spong. 19. O. A. Collins, T. M. Day, H. O. Fisher, and H. Visger.

SECOND CLASS (in alphabetical order).—J. E. Anderton, J. B. Baker, L. P. Banks, J. F. Braga, J. W. Cazalet, W. H. Cory, C. E. H. Cotes, J. S. E. Cotman, C. E. Faunce, H. Gilchrist, S. Goodman, H. Gravely, G. A. Green, W. H. B. Hall, S. S. Hewlett, J. S. Hunt, D. W. Jones, A. S. Kenny, F. W. E. Kinnier, J. T. Land, R. W. Laing, A. Lane, C. J. Lumpkin, E. C. MacPhee, L. Macrae, F. R. Nichols, W. A. J. Nottingham, J. I. Palmer, F. C. Payne, R. W. Pickering, H. A. J. Raymond, T. P. Roberts, R. E. Rygate, W. Spencer, W. F. Stephan, F. Sturges, D. C. Trott, S. Whitaker, H. Wilson.

MR. BUCKMASTER J. TUCK, J.P., M.R.C.S. Eng. and L.S.A., has been elected Mayor of Seaford, Sussex.

THE Walsall Town Council have resolved to adopt the Artisans' Dwellings Act. The insanitary area condemned comprises about two acres of ground, and the estimated cost of improvement is over £10,000.

AN inquiry was commenced at Malahide on the 30th ult. by an inspector of the Local Government Board to examine into the condition of Malahide graveyard, in consequence of a representation by Lord Malahide that future interments would be detrimental to health.

DURING the five weeks ending Saturday, Sept. 30th, the Charity Organisation Society has, through its thirty-seven district committees, dealt with 1799 cases (exclusive of 714 vagrants and homeless persons); of these 656 were dismissed for various reasons, 590 were recommended to legal and charitable agencies, and 533 were assisted by grants, loans, employment, and in other ways.

THE Thames Conservancy have applied to the Kingston County Bench for a summons against the corporation of Kingston-on-Thames for having neglected within the prescribed period to withdraw the sewage of the town from the river Thames. It was stated that the penalties claimed were £50 a day for over 2000 days. The summons was granted, and made returnable in a fortnight. Next week a similar application will be made against the Surbiton Improvement Commissioners.

AN evening paper announces that enteric fever is still very prevalent in Padstow, Cornwall. Since the commencement of the outbreak over 200 persons have been attacked; the mortality, happily, however, is not very great. We pointed out a few weeks back the sanitary defects of the town, and to which the epidemic is ascribable. Our contemporary also draws attention to the imperfect state of the sewerage works, and to the fact that there are no means of flushing the drains in dry weather.

UNIVERSITY OF CAMBRIDGE.—Professor Humphry has given notice as follows:—The course of lectures on Practical Anatomy will commence (with the Description of the Joints) on Tuesday, October 10th, at 9 A.M., and be continued daily until October 23rd, and after that on Mondays, Wednesdays, and Fridays. The course of lectures on Anatomy and Physiology will commence on Thursday, October 19th, at 1 P.M., and be continued on Tuesdays, Thursdays, and Saturdays. The subject this term will be the Nervous System with the Organs of Special Sense. Gentlemen not requiring certificates may attend this course without fee. Both courses are intended for students preparing for the Natural Sciences Tripos as well as the medical examinations. Superintendence of Practical Anatomy daily from 9 to 4.

THE annual meeting of the members of the Scottish Midland and Western Medical Association will take place in the Bedford Hotel, 54, St. George's-place, Glasgow, on Friday, 13th October, 1876. The chair will be taken at two o'clock by Dr. Robert Moffatt, the President of the Association. After the routine business has been disposed of a communication will be presented from Mr. John C. Sloan, L.R.C.P. London, on "The Establishment of a Fund for Invalided Medical Men, and the Education of Necessitous Orphan Children of the Profession in Scotland." At 4.30 the usual dinner of the Association will take place.

BEQUESTS ETC. TO MEDICAL CHARITIES.—Mr. John Clowes, of Coventry, bequeathed £2000 to the Coventry and Warwickshire Hospital. A Suffolk Rector has given £1000 to King's College Hospital. A Bazaar at Hardwick, in aid of the funds of the Suffolk General Hospital, has realised £1800.

POLLUTED WELLS.—The medical officer of health for Cardiff, at a late meeting of the Town Council, reported that there were 282 houses in the Canton suburb supplied with water from wells which was quite unfit for domestic purposes. There were also many other houses supplied with water unfit for drinking by reason of being largely contaminated with sewage. The Council were urged to issue notices directing the offending wells to be closed, which, after some discussion, they agreed to do.

Medical Appointments.

ALEXANDER, W. C., M.B., C.M., has been appointed House Surgeon to the Greenock Infirmary.

CHRISTIE, J., M.D., has been appointed a Dispensary Surgeon to the Western Infirmary, Glasgow, vice Fleming, resigned.

COOPER, W., M.R.C.S.E. & L.M., L.S.A.L., has been appointed Medical Officer and Public Vaccinator for the Lower Widnes District of the Prescot Union, Lancashire, vice King, resigned.

DIXON, J. D., M.R.C.S.E., has been appointed Junior House Surgeon to the Newcastle-upon-Tyne Infirmary, vice Mickle, resigned.

DRUMMOND, D., M.D., has been appointed an Honorary Physician to the Newcastle-on-Tyne Dispensary, vice Black, resigned.

EALES, H., M.R.C.S.E., has been appointed an Honorary Medical Officer to the Birmingham and Midland Eye Hospital, vice Bracey, resigned.

ELLIOTT, C., M.D., has been appointed an Acting Physician to the Bristol Hospital for Sick Children and the Out-door Treatment of Women.

ELLISTON, G. S., M.R.C.S.E., L.S.A.L., has been reappointed Medical Officer of Health for the Ipswich Port Sanitary District for one year.

GEMMELL, S., M.B., C.M., has been appointed Extra Dispensary Physician to the Western Infirmary, Glasgow.

HASTINGS, G., M.D., L.R.C.P.L., has been appointed Physician to the Westminster General Dispensary, vice Stone, resigned.

HINGSTON, A., M.R.C.S.E., L.S.A.L., has been re-elected Medical Officer of Health for the Liskeard Urban Sanitary District for one year.

HOLLAND, L., M.D., has been appointed an Honorary Physician to the Newcastle-on-Tyne Dispensary, vice Fleming, resigned.

HORDER, T. G., L.R.C.P.Ed., M.R.C.S.E., has been appointed Medical Officer to Court Lord Tredegar, No. 3354, of the Ancient Order of Foresters, Crockherbtown, Cardiff, vice Evans, deceased.

JONES, W. L., L.R.C.P.Ed., L.F.P.S.G., has been appointed Medical Officer of Health for the Western Sub-district of the Lladilofawr Rural Sanitary District, vice Lloyd, deceased.

KIRK, W., M.R.C.S.E., L.S.A.L., has been appointed Medical Officer and Public Vaccinator for the Sproatley District of the Skirlaugh Union, Yorkshire, vice W. Kirk, Jun., M.R.C.S.E., L.S.A.L., deceased.

MCKEOGH, T., L.F.P.S.G., L.A.H.D., has been appointed Apothecary to the Workhouse, Ballinrobe Union, co. Mayo, vice Poyntz, deceased.

NOTTER, J. L., M.D., L.R.C.S.I., Staff-Surgeon Army, has been appointed Assistant-Professor of Military Hygiene at the Army Medical School, Netley.

RENTON, J. C., M.B., L.R.C.P.Ed., L.R.C.S.Ed., has been appointed Extra Dispensary Surgeon to the Western Infirmary, Glasgow.

RIDGE-JONES, Dr. T., late Senior Assistant-Physician to the Victoria Hospital, Queen's-road, Chelsea, has been appointed Physician, vice Cavafy, resigned.

ROHANNE, C. O'Looney, L.R.C.P.Ed., L.R.C.S.I., has been appointed Medical Officer, Public Vaccinator, and Registrar of Births &c., for the Youghal Dispensary District of the Youghal Union, co. Cork, vice Curran, deceased.

SLEVIN, J., L.K.Q.C.P.I., F.R.C.S.I., has been appointed Medical Officer to the Longford Union Workhouse and Fever Hospital, and Consulting Sanitary Officer for the Longford Rural Sanitary District, vice Nicholls, deceased.

SMITH, G. J. M., M.B., C.M., M.R.C.S.E., has been appointed Medical Officer and Public Vaccinator for No. 4 District of the Cuckfield Union, Sussex, vice Monckton, resigned.

STEVEN, A., M.D., has been appointed an Acting Physician to the Bristol Hospital for Sick Children and the Out-door Treatment of Women.

WALKER, A., M.D., C.M., has been appointed Medical Officer of Health for the Putney Sub-district of the Wandsworth District, vice Whiteman, deceased.

WICKS, W. C., M.B., L.R.C.P.Ed., has been appointed an Honorary Physician to the Newcastle-on-Tyne Dispensary, to carry out a resolution of the Governors increasing the Staff of Physicians to five.

WILKINS, E. W. S., M.R.C.S.E., has been appointed House Surgeon to the Blackburn and East Lancashire Infirmary, vice Crawford, resigned.

Births, Marriages, and Deaths.

BIRTHS.

EARLE.—On the 24th ult., at Brentford, the wife of Edward S. Earle, F.R.C.S.E., of a son.

LITTLEJOHN.—On the 25th ult., at Hanwell, the wife of S. G. Littlejohn, M.B., prematurely, of a daughter.

MORRIS.—On the 22nd ult., at Euston-place, Leamington, the wife of Joseph Morris, Surgeon, of a daughter.

REYNOLDS.—On the 28th ult., at Upper Leeson-street, Dublin, the wife of James Emerson Reynolds, M.D., of a daughter.

SATCHELL.—On the 25th ult. (Tin-Wedding-day), at Groombridge, near Tunbridge Wells, the wife of Walter A. Satchell, F.R.C.P.Ed., M.R.C.S.E., &c., of a daughter.

SMITH.—On the 30th ult., at George-street, Hanover-square, the wife of Eustace Smith, M.B., of a daughter.

MARRIAGES.

MAHON—FARMER.—On the 27th ult., at St. Paul's, Great Portland-street, George Annesley Derville Mahon, M.R.C.S.E., to Sarah Jane, daughter of Joseph Farmer, Esq.

PHAYRE—O'GRADY.—On the 27th ult., at St. Patrick's, Dublin, Thomas Raleigh Phayre, L.R.C.P.Ed., to Elly Mary, daughter of J. O'Grady, Esq.

SINCLAIR—FERGUSON.—On the 28th ult., at Albyn-place, Aberdeen, by the Rev. William Murray Keay, of Foveran, David Sinclair, Surgeon Madras Army, to Jeannie Birnie, second daughter of John Ferguson, Advocate, Aberdeen. No cards.

TUCK—MANBY.—On the 3rd inst., at the Parish Church, Seaford, Sussex, by the Rev. W. H. M. Buck, Vicar, Buckmaster Joseph Tuck, J.P., M.R.C.S., &c., Mayor of Seaford, to Elizabeth Sarah, daughter of W. E. Manby, Esq., of Gable End House, Seaford, and Regent's-park, London.

WILLIAMS—EVANS.—On the 4th inst., at the Parish Church, Wrexham, by the Rev. John Jones, Vicar of Rhos, assisted by the Rev. William Williams, Vicar of Llanrhaidr, M., and the Rev. James Dixon, Senior Curate of Wrexham, Joseph Llewelyn Williams, M.B., of Wrexham, to Margaret Rimmer, eldest daughter of Edward Evans, Esq., of Bronwylfa, Ruabon.

WRIGHT—KING.—On the 3rd inst., at Prestwich Church, by the Rev. E. H. Robson, M.A., Incumbent of Pendlebury, assisted by the Rev. W. H. B. Tucker, M.A., Curate of Cheadle, Francis James Wright, M.D., of Northumberland House, Stoke Newington, to Charlotte Dundas, second daughter of the Rev. Richard King, of Prestwich.

DEATHS.

BUCKMASTER.—On the 18th ult., at Midleton, co. Cork, William Buckmaster, M.D., aged 45.

FISKE.—On the 24th ult., at Donhead, Wilts, John Frederick Fiske, M.R.C.S.E., aged 38.

GRANT.—On the 28th ult., at Hawick, John Grant, M.D.

GROOME.—On the 23rd ult., at Ore, Sussex, Leonard Groome, M.R.C.S.E., aged 47.

MACBETH.—On the 25th ult., at Ramsgate, John S. Macbeth, M.A., M.D., late of Brixton-road, London, in his 39th year.

NASON.—On the 11th ult., at Rathcormack, co. Cork, Henry Wilson Nason, L.R.C.P.Ed., aged 32.

TAYLOR.—On the 28th ult., at Heywood, Lancashire, Daniel Taylor, M.R.C.S.E., aged 42.

TOMKINSON.—On the 22nd ult., at Cheadle, Richard Tomkinson, M.R.C.S.E., aged 64.

WILLIAMS.—On the 23rd ult., at Carmarthen, John Lewis Williams, M.R.C.S.E., aged 53.

WISEMAN.—On the 13th August, at Cupar, Robert Wiseman, L.R.C.S.Ed., aged 76.

[N.B.—*A fee of 5s. is charged for the insertion of Notices of Births, Marriages, and Deaths.*]

Notes, Short Comments, and Answers to Correspondents.

RELATIVE VALUE OF CHINCHONIDIA AND QUINIA.

SOME little time since the Medical Board of the Bellevue Hospital, New York, instituted experiments concerning the relative merits of the quinia and chinchonidia sulphates. The latter salt was used almost exclusively for over a month in the hospital. At the last meeting of the Board the members on duty related their experiences. The surgical members declared chinchonidia to be a valuable tonic and febrifuge, but found it to be quite inadmissible in severe surgical injuries, especially to the genito-urinary system, and in cases of shock, by reason of its tendency to induce emesis and congestive symptoms. In such cases chinchonidia had to be abandoned, and quinia substituted. In purely medical affections, however, such as fever, pneumonia, &c., its use was attended with good results. When the tonic effects of chinchona are desired, chinchonidia may safely be resorted to—a fact of considerable importance, bearing in mind the difference in price of the two salts. It is obvious that if the cheaper salt can be successfully administered in large institutions in cases usually treated with quinine, a great financial saving would annually be effected.

Sir George Bowyer, (Radley-park.)—We must decline to insert Sir George Bowyer's indiscreet letter, or to receive his gratuitous advice how to conduct the journal.

M.D.—The Geographical Distribution of Disease, by Mr. Alfred Haviland.

QUARANTINE AT THE INTERNATIONAL MEDICAL CONGRESS.

IN the section of Sanitary Science at the International Medical Congress, Dr. J. M. Woodworth read a paper on Quarantine with especial reference to Cholera and Yellow Fever. After briefly reviewing the practice of quarantine in the past and present, the mode of propagation of certain infectious diseases, &c., Dr. Woodworth advanced the following conclusions, which were adopted by the section:—(1) The supervision of ocean travel ought to be directed to securing good sanitary condition of vessels at all times, out of as well as in port. (2) A system of port sanitation should be adopted and administered for each country or place separately, modified in particular cases by taking into account the liability of the port to infection, the period of incubation of the disease, the length of time consumed in the voyage, and the measures enforced by the vessel in passage. (3) In some countries the detention of passengers and crews of ships hailing from infected ports is warranted, but for such time only as is necessary to complete the period of incubation of cholera or yellow fever, counting from the date of departure from an infected port or landing from an infected vessel; but in no instance should passengers or sailors be held for observation on board an infected vessel, and such vessel should not be detained, beyond the period required for inspection and thorough disinfection and cleansing. (4) Recognising the fact that the modifications of infectious diseases may sometimes elude the most vigilant sanitary supervision of shipping, the importance of wisely-directed internal sanitary measures can scarcely be over-estimated. (5) So far as America is concerned, it is desirable that prompt and authoritative information should be had of the shipment of passengers or goods from districts infected with cholera and yellow fever, thereby insuring the thorough disinfection of infected articles. (6) It is believed that the endemic forms of cholera and yellow fever are the fields which give the greatest promise of satisfactory results to well-directed and energetic sanitary measures, and to this end an international sentiment should be awakened so strong as to compel careless people to employ rational means of prevention. We trust some practical outcome may soon follow the consideration of this important subject in America, and shall gladly reciprocate any exhibition of "international sentiment" on the part of our cousins directed to the amelioration of humanity afloat.

Dr. Hooper.—The quotation from Herbert Spencer was not of sufficient general interest to warrant its publication.

Mr. George L. Napier.—Thanks.

SOMETHING FOR PROFESSOR TEUFELSDRÖCKH.

To the Editor of THE LANCET.

SIR,—During my wanderings this summer holiday my mind was much impressed by the invariable attention bestowed on all members of the clergy, whether they were of the Anglican Church or Nonconformist it mattered not. To them courtesy and attention were always given. The reason of which I have attempted to solve, and offer my solution to THE LANCET for criticism. My solution is this: the clergy wear a distinctive dress; his attire makes his profession at once known. The doctor can seldom be recognised by a distinct attire. He appears to the public as a simple gentleman, and conversation alone will reveal his calling. Would it not be better for the medical profession to adopt a *specialité* in dress? This is the question I would offer for your analysis.

Yours &c.

September 30th, 1875. AN OLD M.R.C.S. & L.S.A.

*** The "courtesy and attention" purchased at the price of going about labeled would not by most men be considered a good bargain; but if it were seriously desired to adopt a medical badge or garb, the preliminary difficulty of determining what that should be is overwhelming. Some years ago it was suggested that the ingenious little nipper, occasionally inserted in the crown of the hat to suspend the stethoscope, should be affixed externally, so that the baton of the physician might be exposed lying across his beaver. Some enterprising practitioners secured "courtesy and attention" by allowing the ivory ear-piece of their stethoscope to protrude from the coat-pocket; others, at the risk of damaging the instrument, permitted it to fall out of the hat, and roll with fine effect a short distance. In a railway carriage or on a steamboat the difficulty of impressing those around with the quality of the medical traveller is not great, and, failing other devices, there is always the resource of talking "shop." At hotels, the visitors' book affords an opportunity for displaying styles and titles which should satisfy the most longing taste. It may be eked out by writing letters to oneself and even telegrams. Meanwhile we suspect ninety-nine out of every hundred medical men would infinitely prefer to be unrecognised in a professional capacity by those with whom they casually come into contact; and if "courtesy and attention" is not exacted as the homage due to their personal demeanour and character, they would scarcely care to enjoy these luxuries at the expense of parading a professional character.—ED. L.

Mr. H. Brown.—No doubt, in fairness, our correspondent's letter will be inserted in the journal to which it has been forwarded.

S. C. C.—We would advise our correspondent to write again to the Secretary of the University.

GRENADA, WEST INDIES.

To the Editor of THE LANCET.

SIR,—In reference to the advertisement in last week's LANCET for two medical men wanted for Grenada, West Indies, I beg to say I shall be happy to give intending candidates any information they may require, having lately left that colony after a residence of nearly five years.

Yours &c.,

2, Tollington-park, Holloway, N., Oct. 2nd, 1876. F. G. WALKER.

THE EMBALMING OF BELLINI.

WHEN, forty-one years ago, the death of the young author of the "Puritani" saddened Europe as the death of a favourite singing-bird saddens a domestic circle, every honour was lavished on his remains, and his body was handed over for embalment to Dr. Dalmas, then a physician of reputation in Paris. The doctor's mode of procedure was something like this: He removed the thoracic and abdominal viscera, and after saturating them in common salt, rendered more alkaline by soda, he replaced them (except the heart, which was put in an urn), and, when *in situ*, he treated them with aromatic powder. He then sprinkled the outer surface thickly with more aromatic powder, and rolled the entire body from head to foot in linen, so as to form a dense layer. This he covered tightly with cerecloth, and then deposited the whole in a lead coffin, which again he put into an oaken box. This was buried in the Père la Chaise, and on the 15th ult. it was exhumed. The wooden box had given way entirely in the damp earth; but the leaden coffin was conveyed to Catania, the composer's native place, for reinterment in the Cathedral. It also had been penetrated by the damp, and the interspaces between the body and the coffin were found filled with a kind of glue, in which the aromatic powder had mingled with the decomposed wrappings. Bellini's beautiful features were quite recognisable, though the skin was blackened, the luxuriant hair and fine teeth were uninjured, and the flesh was adherent to the bones, except at the finger-joints. Dr. Dalmas' process was certainly neither skilful nor carefully performed. Just about the same time, Tranchina, a compatriot of the composer's, had invented a mode of embalming which is much more satisfactory. Eight decigrammes of arsenious acid, combined with a little cinnabar, are dissolved in nine chilogrammes of spirits of wine, and injected, *secundum artem*, into the carotid artery. For more than two months the body remains fresh, inodorous, inflexible, and (thanks to the cinnabar) of its natural colour. Thereafter desiccation commences, and it indurates so as to last for any time. Modifications by Gannal and others have improved upon Tranchina's method; but, even as it was in 1835, it would have answered much better than that of Dr. Dalmas'. As it is, Bellini's few remaining survivors are only thankful that the features were recognisable, and retained consistency enough to admit of a mask being taken, from which a bust of the composer in bronze or marble will shortly be executed by the great sculptor, Monteverde.

SANITATION AT PENZANCE.

To the Editor of THE LANCET.

SIR,—Your short article on "Sanitation at Penzance" is quite refreshing to many who live in West Cornwall. We trust it may be the silver lining to the thick black cloud of ignorance and apathy which has so long enshrouded us, and that it may lead to the investigation of our gross sanitary defects and high zymotic death-rate by one of THE LANCET's valued Special Commissioners.

The fact stares us in the face that the Public Health Act is a dead letter in West Cornwall; permissive in its character, it is at least a generation in advance of that public opinion which guides our town councils and local boards. In neighbouring towns it is the merest sham. Medical officers of health are not under the control of the Local Government Board. The bugbear of centralisation has been exhumed, and the officers of health receive a nominal salary to do nominal work, and above all things not to make any reports which might interfere with the vested interests in filthy, unwholesome houses, too frequently owned by the very men who appoint and can dismiss.

The Town Council of Penzance is in many respects a model one; no political bickerings mar its discussions; but in sanitary matters it is just like its neighbours, and, to tell you a secret, does not believe in a Public Health Act. I should be sorry to say one word which might detract from the merits of Penzance both as a summer and winter health-resort. The scenery within easy reach is unrivalled of its kind; the uniform temperature and mild climate are fully deserving of the praise of Dr. Paris and Sir James Clark. Nature has done much, but man very little; and it behoves its Town Council to rouse itself from the lethargy which a balmy atmosphere may have inspired, and import a little of the energy in sanitary matters which has made the fortune of many a watering-place less favourably situated.

Your obedient servant,
Sept. 30th, 1876. ESPLANADE.

A Reader.—We do not forward private answers. A man must, of course, be qualified legally to practise medicine.

Dr. Broadbent is thanked.

THE COMPETITIVE EXAMINATIONS FOR THE PUBLIC MEDICAL SERVICES.

To the Editor of THE LANCET.

SIR,—On the 14th ult. a competitive examination was held at the London University for appointments in the medical services of the Indian Army, the British Army, and the Royal Navy. While the names of the successful candidates for the two latter have been published, those for the Indian Army—admittedly the highest branch of the public service—have not appeared (as far as I am aware) either in the medical or general press. If the omission of the names from your columns was *intentional*, will you kindly assign the reason; but if *accidental*, I shall feel obliged by your inserting them, with their respective marks affixed, in your next number.

Your obedient servant,
Sept. 25th, 1876. ENQUIRER.

P.S.—As the Indian medical appointments constitute the "blue riband" of the profession in the public services, would it not be desirable, in the interest of the general public, to attach to the names of the successful men the University or College at which they received their qualifications? An honest rivalry of this sort cannot be otherwise than interesting and beneficial to the whole community.

*** The official list has not been forwarded to us.—ED. L.

BOOKS FOR FIRST-YEAR'S MEN.

Inquirens.—Our correspondent would do well to obtain a set of bones, and then to read Wagstaffe's or Ward's Osteology, or the chapters in Gray's or in Quain's Anatomy. It will be useless to attempt to learn muscles &c. without dissection. If there be opportunity for dissection, Ellis's Demonstrations are decidedly the best. Histology is treated briefly in the last edition of Gray's Anatomy, and completely in the last edition of Quain. The beginner in physiology should first of all read Huxley's excellent little work, and then Kirkes's, or, if he wish it, the larger work by Marshall, or that by Carpenter, edited by Power. Roscoe's Chemistry stands in highest favour at most medical schools; but Mr. Barff's book is of a very high order of merit, and pleasantly written, and serves also as an introduction to the more advanced and elaborate work of Professor Williamson. There are, of course, many other works recommended by various teachers; but the above will perhaps, upon the whole, be best fitted for our correspondent's purpose.

ENGLISH TROOPS IN INDIA.

To the Editor of THE LANCET.

SIR,—THE LANCET of Aug. 5th has just reached me, and I notice in it an annotation headed "Boy Soldiers," containing an extract from an Indian journal, which is not strictly accurate, and which, as it has acquired importance by your giving it currency, permit me, as it concerns the regiment of which I have medical charge, to correct.

1. The battalion of the 25th Regiment spoken of as quartered in Fyzabad is not the second (this is at present at home), but the *first*.

2. Is Fyzabad a *most healthy* place? I can hardly think so. It has the misfortune to have a most holy city (Ajudhia), whereto pilgrims flock at all times, only three miles off. Lower Bengal contributes no small share of the devotees, and in the district cholera may be said to be endemic. The mortality from this cause is sometimes very great. In June last it amounted to 200 a week. It is only by the unremitting vigilance of the authorities that the station is ever free from it. Again, enteric fever appears with great regularity every year, and the sunstrokes and heat fevers which distinguish its hot seasons,—all these, I think, annihilate the claim of Fyzabad to being a *most* healthy place.

3. The regiment did *not* suffer severely ever since its arrival, as stated. It is true that the hospital for a few months was pretty full, but it was with that most *aclimatic* class of disease—venereal. The boy soldier, excited by his very novel surroundings after arrival, is apt to be carried away by his animal propensities, and generally to be rather reckless in his doings. After considerable trouble these diseases were gradually suppressed, and, until the hot season had fairly set in, the men's health was excellent. Therefore up to this time, as far as climate was concerned, the regiment had not suffered at all.

These are the three points I wish to correct.

After this came the state of things described in the extract, and with fair accuracy. I will not touch upon this here further than to say that there are very good grounds for believing that the outbreak of enteric fever was due to the vitiated water of a certain well. Heat, too, played its part by, as you have remarked in a late number with reference to Indian outbreaks of enteric, intensifying the poison, or making the individual more receptive.

In conclusion, if boy soldiers must be sent out, immaturity should be shielded by a hill residence during the first two hot seasons. It does not seem sufficient to send to the hills a few of the youngest and weakliest of a regiment. Freshly arrived regiments of young soldiers should go *en masse* from April till November in their first and second years, and the journey should be performed by marching in the cool season of India, a most healthful exercise. Thus prepared, such a corps might after be safely kept anywhere in the plains.

Yours obediently,
G. GRIBBON, M.B.,
Surgeon Major, in medical charge of
India, Sept. 4th, 1876. 1st Battalion, 25th Regiment.

*** We think that Dr. Gribbon somewhat misses the point of our Indian contemporary's contention. It charges the Imperial Government with sending immature youths out to India, and this charge is tacitly admitted by our correspondent. The inaccuracy as to the number of the battalion is immaterial, and does not affect the issue. And, again, with regard to the expression *most* healthy. We fancy the majority of Indian medical officers would call Fyzabad a healthy station, as stations go in India. We should rejoice to see the excellent suggestion at the end of our correspondent's letter adopted. If it were, it could not fail to vitiate the statistical data of those who advocate a scheme for providing India with a *local* European army.—ED. L.

GOUT AND ALCOHOL.

To the Editor of THE LANCET.

SIR,—In answer to the query of your correspondent, whether any case is known of a total abstainer having been afflicted with gout, permit me to say that I have met with one such case, in which the disease was hereditary. The patient never tasted any kind of intoxicating liquor, is now about seventy-three years of age, and has had occasional attacks of gout during the last fifty years. Though I have met with but one case of an abstainer having gout (and that inherited), I have had under my care during the last fifteen years upwards of 1500 cases of this disease amongst moderate and immoderate drinkers. In all these cases the drinking of alcohol in every form has been peremptorily and immediately forbidden, and not a few careful and limited drinkers have been almost entirely free from the disease since becoming total abstainers.

Yours faithfully,
London, Sept. 30th, 1876. NORMAN KERR, M.D.

To the Editor of THE LANCET.

SIR,—In answer to "An Enquirer" in your last number, as to the occurrence of gout in a person who was a total abstainer, I beg to state that in a very well-known gentleman of this city the disease occurred in a well-marked form, and within five years of his death, yet he had been a total abstainer for forty years. The case was seen by Sir D. Corrigan as well as by,

Yours truly,
Dublin, Oct. 1st, 1876. HENRY KENNEDY, M.B.

GALEN'S WORKS.

AT length we shall have an edition of this great man's writings, which stand out so conspicuously in the history of medicine. Professor Ivan Müller, of the University of Erlangen, has issued the first volume of the "De Placitis Hippocratis et Platonis," with a reconstituted text, a Latin translation, and critical notes—the whole introduced by prolegomena of much learning and interest. Prof. Müller tells us that, with the Byzantines, Galen was read almost exclusively in the extracts made from him by Oribasius; as early, however, as Paulus Æquineta (660 A.D.) even these had a decreasing number of readers; till, towards the close of the eleventh century, Arab influences aroused an interest in the great physician, and under their auspices his works were often re-edited. In the West he divided empire with Hippocrates, particularly in the medical schools of Salerno, Naples, Bologna, Montpellier, and Paris; but, thanks to Arabian interpreters, he began to overshadow the father of medicine himself till, towards the close of the fifteenth century, he had wellnigh eclipsed him. His empire was at its apogee when the new criticism began to impair it. Vesalius in 1543, in his treatise, "De Corporis Humani Fabrica," exposed many anatomical inaccuracies in the writings of the master. Our own Harvey, in his "Exercitatio Anatomica de Motu Cordis et Sanguinis in Animalibus," published in 1628, finally dethroned him. Galen after this was little more than a name, and since the sixteenth century there have been but two complete editions of his works: that of Chartier, which also included the Hippocratic treatises (1630—1679), and that of Kühn (1821—1833), neither of them satisfactory. At length, however, we are to have a Galen which shall take rank with the two classic editions of Hippocrates, that of Littré and that of Ermerins, and in Prof. Müller's amended Greek text, or his (on the whole) accurate Latin version of it, the scholarly physician can instruct himself with ease and comfort as to the doctrines of the medical autocrat of the middle ages.

MILITIA SURGEONS.

To the Editor of THE LANCET.

SIR,—Respecting the grievances present and in prospect of militia surgeons, I wish to add briefly a few words in addition to what have hitherto appeared in your valuable columns. The staff hospital sergeant, as is well known, has been taken away from us, and a volunteer non-commissioned officer appointed in his stead, who is totally ignorant of the duties he has to perform. The surgeon has to instruct him, and do much unprofessional work in the initiation, and after that, with all the instructive labour bestowed, it is often labour lost; either the man cannot be taught his duty, or dislikes it, or is a time-expired man, when his place is filled by another, who had better have remained with his company for any service he can render the surgeon. In my own case I engaged a pensioner to superintend and assist the sergeant, for there is much of his duty that no one in private practice could or would be expected to stoop to. The same may occur at every annual training. Then as to the *tempting* offer to put militia surgeons on an equality as regards pay and rank with line surgeons: we now hold and have done for years the same relative rank as surgeon-majors of the line,—what's in a name? With regard to the increase of pay, militia surgeons may justly claim that by the War Office circular, dated 23rd April, 1869, para. A, giving the order "to raise the pay of militia officers to the same rates as those of officers of corresponding ranks in the line." Thus it is clear that militia medical officers who were up for training after the issue of the Royal Warrant on the 29th of April last were, according to the circular quoted, entitled to the additional pay conferred by Warrant. Have they received it? In future the militia surgeon will have twenty-seven days of camp life, the cost of uniform and camp equipage, mess and band expenses, the former including mess guests, balls, and numerous subscriptions, which will reduce his pay to infinitesimal proportions; besides he must not overlook the loss of prestige by quitting his practice a month annually for the temporary assumption of a military title of no intrinsic value whatever. How fallacious, then, the so-called increase of pay and superior rank! "Mere springes to catch woodcocks." The new Militia Regulations, by depriving us of the allowance for the examination of line recruits during the training, reduces the increase of pay to *nil*, so that the visionary inducements held out to future militia surgeons by the Secretary of State for War may be met in an equally fair and generous spirit by a general response—"Thank you for nothing."

Your obedient servant,

Sept. 30th, 1876. A MILITIA SURGEON.

Mr. Robert W. Cooly.—The circumstances were annoying, and apparently ungracious on the part of the patient. But we are not clear that there was any failure of courtesy on the part of the other practitioner. He was called in to a case which had not been previously treated by any medical man. It was not his business to go into the professional relations of his patient in former illnesses. It is different where, in the course of being attended by one practitioner, a patient wishes to make a change, and have another. He is, of course, at liberty to do so; but it is his duty to give due and courteous intimation of the change to the practitioner first in attendance, and it is the duty of the second practitioner called in to see that this is done. It is even his duty to dissuade the patient from change, and to express his willingness to meet his professional brother in consultation in the case.

A CORRECTION.

To the Editor of THE LANCET.

SIR,—Permit me to correct an error which appears in your last issue. It is there reported that in a certain week (presumably that ending Sept. 16th) seven deaths had occurred in this hospital from typhus fever. During the week ending Sept. 16th, seven such cases were admitted, and in the following, ending Sept. 23rd, six. In neither week did any death from this disease take place.

Yours &c.,

WALTER NEEDHAM,
Senior Resident Medical Officer.

Workhouse Hospital, Manchester, Oct. 3rd, 1876.

RESULTS OF ALCOHOLISM.

TOWARDS the close of the Congress of Public Health at Brussels, Dr. Desguins presented a paper depicting the evils resulting from the abuse of alcoholic liquids. His illustrations referred to physical effects and to moral consequences chiefly affecting the drunkard himself. He stated stated that 85 out of 87 cases of delirium tremens end fatally (?), and that madness and suicide follow continuous alcoholism. He urged a measure for limiting the number of establishments for the sale of intoxicating liquors, and another for the beverages themselves to be inspected. Dr. Crocq, Professor of Medicine at the University, and a physician of considerable repute, averred that alcohol produces worse lesions than arsenic, and that a drunkard died at the age of forty with an emaciated and feeble body, and pointed out the especially destructive effects of absinthe—an abominable beverage, happily almost unknown in this country. Dr. Crocq is convinced that within the last thirty years the consumption of alcohol had increased to an extent that greatly augmented the amount of mental disease existing in Europe. The hospitals, he stated, are full of such cases. Mr. Hoghe was inclined to the belief that it was not alcohol which worked the mischief, but the deleterious ingredients introduced into spirituous drinks, especially when new, and he thought that a "sanitary police" should prevent the sale of drinks until they have been allowed to soften with age. The discussion on this important subject lasted for some hours, the general opinion appearing to be, not in the direction of teetotalism but in favour of the moderate use of beer, wine, and spirits.

Mr. J. C. Hall.—Any one of the text-books.

TRANSFUSION.

To the Editor of THE LANCET.

SIR,—Would you kindly allow me to ask Mr. Wartenberg, through your columns, for further particulars relating to the following sentence which appeared in THE LANCET of Sept. 23rd:—"It was intended to practise immediate transfusion by means of Dr. Aveling's instrument, but its action not being satisfactory it was discarded." In what way was its action not satisfactory? From what maker was the instrument obtained? I am quite aware that transfusion by my instrument is far from perfect, and I ask these questions publicly that its bad as well as its good points may be known. The only great objection to its use I have met with is the coagulation of the blood in the small pipes after eight or ten ounces have been transfused.

I am, Sir, your obedient servant,

J. H. AVELING.

Upper Wimpole-street, Cavendish-square, September, 1876.

Miss Spence.—The habit is injurious if carried to excess. We do not forward private answers.

Mr. S. M. Bradley.—We shall be glad to receive an abstract of the address for publication.

Rev. G. Allen (Islington) is thanked.

MONSTERS.

To the Editor of THE LANCET.

SIR,—While assisting in a practice at Birkenhead last year (I mention the place because in your last number Mr. Francis Vacher relates another case which occurred there) I had the opportunity of diagnosing the deformity before birth, and making a sketch of it afterwards. The monster was anencephalous and anochous. The frontal bone terminated superiorly at the eyebrows. The skin of the face, which was complete all but the forehead and chin, passed just over the ridge of bone and merged into what at first sight appeared to be a "pulp," but on closer examination was found to be the dura mater, *with the sinuses*, and very vascular. The parietals were absent, the occipital rudimentary, as also the squamous part of the temporals. The vascular membrane extended, uncovered, down to the seventh or eighth dorsal vertebra, the surface being kite-shaped, with arched summit at forehead. The shoulders came off so close to the ears that the lobules were displaced outwards by them. Just above the spinal canal termination was a tumour the size of a small orange, which slightly raised the membranes above their dead level.—Yours faithfully.

Oct. 1st, 1876. E. M. S.

To the Editor of THE LANCET.

SIR,—On Friday, Sept. 29th, I was called to see a woman, Eliza B——, aged thirty-eight, who it was stated had given birth to a still-born child, which child was (as the messenger stated) wrong. I went immediately, and found the woman much worn out with the labour, but otherwise going on well. On examining the children or child, I found two female children, fully grown. Each child had its right component of arms, legs, and ears; but the two children were united from the pubis upwards along the middle line, and the two heads had apparently become amalgamated. The child had only one face, the two right ears showing in the front, but the two left were joined behind immediately in the centre of the head. Both children had anal orifices, and both organs of reproduction. There was only one umbilical cord, and only one placenta. The woman received a severe fright when only two months gone. She had had three single births and one pair of twins previously.

Yours &c.,

September, 1876. H. FOORD CLARK, L.R.C.P. & S. Edin.

MEDICAL AMENITIES IN EMERGENCIES.

To the Editor of THE LANCET.

SIR,—Permit me, in answer to the letter of Mr. Josiah Williams in your issue of September 23rd, to state that, in the case referred to, Mr. Williams did not arrive at Dalancothy until two hours after Dr. Lewis, of Llandovery, and myself had attended to and dressed the patient's wounds. Therefore, we did not deem it necessary to introduce him to the case, as the patient and her friends expressed a wish to the contrary. I further wish to state that Mr. Williams was not called to Dalancothy, but sent by a friend of the family, who resides at Llandovery, upon hearing of the tragedy; besides, the distance travelled by him was nine, and not twelve miles. Mr. Williams is in error in stating that I am not the usual medical attendant, having attended the family regularly for the past eight or nine years.

I remain, Sir, yours &c.,

R. JENKINS, L.R.C.P. & S. Edin., &c.

Llanwrwel, Carmarthenshire, September, 1876.

LUNATICS IN FRANCE.

A CORRESPONDENT, "M.D.," writes to *The Times* to correct a statement which lately appeared in that journal, to the effect that the French law was similar to the English in requiring two medical certificates before a person alleged to be of unsound mind could be placed in an asylum. "M.D." states that this interpretation of French law and procedure is far from being correct, as he has himself during a long practice in Paris been under the necessity of certifying to an unsound state of mind, and on this certificate alone a patient has been placed under restraint in an asylum. When a *conseil de famille* has placed an unfavourable report on the mental condition of a relative before the Procurator, he will order two alienists to examine him separately, and to send him their report; but "one medical certificate of insanity suffices to deprive the suspected individual of his liberty."

CHLORAL HYDRATE.

To the Editor of THE LANCET.

SIR,—Would you kindly inform me, through your journal, where I can obtain all possible information as to the action and uses of chloral hydrate—any articles &c. in THE LANCET, pamphlets, or works on Materia Medica.

I am, Sir, yours &c.,

Blackburn, Oct. 2nd, 1876. E. H.

*** Adams, THE LANCET, vol. i., 1870; Amory, *New York Medical Journal*, 1870; Beck, *St. Louis Medical and Surgical Journal*, June, 1872; Bouchut, *New York Medical Gazette*, December, 1870; Chapman, THE LANCET, 1871; Demarquay, *Bulletin Thérapeutique*, 77, p. 307; Fuller, THE LANCET, March, 1871; Lucas, THE LANCET, vol. ii., 1875, p. 559; Labbee, *Archives Générales*, 1870, tome xvi., p. 338; Liebreich, *Wiener Medicinische Wochenschrift*, August, 1869; Personne, *Journal de Pharmacie*, 1870; Richardson, *Medical Times and Gazette*, September 4th, 1870; Rigden, *Practitioner*, xxvii., 1870; Russell, *Glasgow Medical Journal*, February, 1869; Reynolds, *Practitioner*, March, 1870; Macnamara, *Practitioner*, November, 1874; Murchison, THE LANCET, vol. ii., 1870; Dowse, THE LANCET, vol. i., 1875, p. 234; Charteris, THE LANCET, vol. i., 1875, p. 510; THE LANCET, vol. i., 1875, p. 707; Waterhouse, *Practitioner* December, 1870; Playfair, THE LANCET, vol. i., 1874, p. 263; Hulke THE LANCET, vol. ii., 1874, p. 802; Ringer's Therapeutics.—ED. L.

ERRATA.—In the last paragraph of the review of Dr. Péan's Clinical Surgery, on page 464 of our last number, read *eleven years* for "fourteen months."—In the second line of the article headed "The Sale of Opium," on page 472 of our last issue, the word "no" before "registration" was inadvertently omitted.

COMMUNICATIONS, LETTERS, &c., have been received from—Dr. Maudsley, London; Mr. F. Mason, London; Dr. A. Clark, London; Dr. Broadbent, London; Dr. Aveling, London; Dr. Wiltshire, London; Mr. Maunder, London; Mr. Garson, Edinburgh; Mr. Hodges, Leicester; Mr. Bradley, Manchester; Mr. Johnson, Leicester; Mr. Borham; Dr. Mitchell Bruce, London; Dr. Alexander, Greenock; Dr. Mackintosh, Chesterfield; Dr. Cayley, London; Mr. Macnamara, London; Mr. Lockie, Carlisle; Rev. G. Allen, Islington; Mr. Clark, Farnham; Dr. Kennedy, Dublin; Mr. Brown, Northallerton Dr. Hooper, London; Dr. Blandford, London; Mr. Power, Brixton; Dr. Kerr, London; Dr. Curnow, London; Mr. Tuck, Seaford; Dr. Ryder; Mr. Love, London; Mr. Jenkins, Llandilo; Mr. Row, Oakham; Mr. Walter, Holloway; Dr. Waghorn, Redhill; Mr. Forbes, Glasgow; Mr. Shaw, Pennsylvania, U.S.A.; Mr. W. Williams, London; Mr. Wilson, London; Dr. Burgess, Paris; Mr. Slade, West Hartlepool; Mr. Thomas, Sheffield; Dr. Hastings, London; Miss Fisher, Newcastle-on-Tyne; Mr. Wall, Newcastle; Surgeon-Major Gibbon, Naintal; Rev. J. A. Cooke, Barkfoot; Mr. Blount, Chelsea; Dr. Barr, Everton; Mr. Gordon, Edinburgh; Mr. Eales, Birmingham; Mr. Weekes, Southampton; Messrs. Porteous and Co., Edinburgh; Mr. J. O. M. Creery; Mr. White; Mr. Napier; Dr. Bennett; Mr. Cooke; Mr. Bridgman; Mr. Beck; Mr. Hearn, Margate; Dr. Morton; Dr. Needham, Manchester; Dr. Rigley, Preston; Mr. Brookes, Much Wenlock; Dr. Wicks, Newcastle-on-Tyne; Dr. Piggott, Barbadoes; Dr. Maclagan, Dundee; Mr. German Reed; Mr. Williams; Mr. Rose, Stornoway; E. M. S.; S. C. A.; M.R.C.S.; A Wanderer; E. H.; X. L. Y.; Esplanade; Stranger; M.B.; The Director-General of the Navy Medical Department; Medicus, Ruthin; M.D.; X. Y. Z.; Volunteer; T. F., Oldham; Nemo; A Reader; X.; A Militia Surgeon; Veritas; &c. &c.

LETTERS, *each with enclosure*, are also acknowledged from — Mr. Sewill, London; Dr. Ritchie, Otley; Mr. Kendall, Milverton; Dr. Bell, Preston; Mr. Atkinson, Ripponden; Dr. Thomson, Aberdeen; Mr. Bredin, Staplehurst; Dr. Ritchie, Halifax, Nova Scotia; Messrs. Maclachlan and Co., Edinburgh; Dr. Cornish, Kingsbridge; Mr. Murray; Dr. Jones, Towyn; Mr. Lilly, Glasgow; Dr. Davis, Dawley; Dr. Satchell, Groombridge; Dr. Smith, Hounslow; Dr. Stiles, Spalding; Mr. Knight, Northampton; Mr. Ross, Salisbury; Mr. J. Morris, Leamington; Messrs. Harthill, Willenhall; Dr. King, Ilfracombe; Dr. Jones, Southgate; Mr. Hyde, Leominster, Mr. Coward, Huddersfield; Messrs. Dawson Brothers, Montreal; Dr. Hughes; W. S. M., Liskeard; M.R.C.S.; Gamma; Student; M.D., Rotherham; R. F., Aberdeen; P. B. S.; C. D. E.; L. M.; W. H.; A.; S. and L., Barnsley; M.D., Thornton-heath; A. B.; Beta; F.R.C.S., Cheltenham; F. H. M.; Secretary, Peterborough; Ozone; H. W.; E. S., Truro; Mertus; P. Goole.

Tavistock Gazette, Daily Bristol Times, Newcastle Chronicle, Manchester Guardian, Western Morning News, Welshman, Liverpool Post, Examiner, Redruth Times, Spiritualist, Surrey Advertiser, and *Madras Mail* have been received.

METEOROLOGICAL READINGS

(Taken daily at 8 a.m. by Steward's Instruments.)

THE LANCET OFFICE, OCT. 5TH, 1876.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Wet Bulb.	Dry Bulb	Solar Radia. in Vacuo	Max. Temp. Shade	Min. Temp.	Rainfall.	Remarks at 8 A.M.
Sept. 29	29·65	W.	53	56	99	65	50	0·14	Cloudy
" 30	29·61	S.E.	53	55	64	59	50	0·32	Raining
Oct. 1	29·83	E.	53	56	88	59	42	...	Cloudy
" 2	30·21	S.	48	52	70	57	46	...	Cloudy
" 3	29·92	S.E.	53	55	82	60	50	...	Cloudy
" 4	29·79	W.	52	54	99	70	53	0·03	Cloudy
" 5	29·98	S.W.	50	62	95	68	56	...	Fine

Medical Diary for the ensuing Week.

Monday, Oct. 9.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M. each day, and at the same hour.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M. each day and at the same hour.
ST. MARK'S HOSPITAL.—Operations, 9 A.M. and 2 P.M.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.

Tuesday, Oct. 10.

GUY'S HOSPITAL.—Operations, 1½ P.M., and on Friday at the same hour.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 3 P.M.
ROYAL MEDICAL AND CHIRURGICAL SOCIETY.—8½ P.M. Mr. William Adams, "On Subcutaneous Division of the Neck of the Femur for Anchylosis of the Hip-joint."—Mr. Davies-Colley, "On a Case of Resection of the Tarsal Bones for Congenital Talipes Equinus Varus."

Wednesday, Oct. 11.

MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ST. MARY'S HOSPITAL.—Operations, 1½ P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M., and on Saturday at the same hour.
ST. THOMAS'S HOSPITAL.—Operations, 1½ P.M., and on Saturday at the same hour.
KING'S COLLEGE HOSPITAL.—Operations, 2 P.M., and on Saturday at 1½ P.M.
GREAT NORTHERN HOSPITAL.—Operations, 2 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M., and on Saturday at the same hour.
LONDON HOSPITAL.—Operations, 2 P.M.
SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2½ P.M.
HUNTERIAN SOCIETY.—7½ P.M. Council Meeting.—8 P.M. Dr. J. Braxton Hicks, "On some Cases of Suppurating Ovarian Cysts treated by Drainage-tube, with Remarks on Diagnosis."

Thursday, Oct. 12.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M., and on Friday at the same hour.

Friday, Oct. 13.

ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1½ P.M.
ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
CLINICAL SOCIETY OF LONDON.—8½ P.M. Dr. Wolston and Mr. Maunder, "On a Case of Intestinal Obstruction."—Mr. Gordon Brown and Mr. Maunder: Sequel of a "Case of Enterotomy, with Artificial Anus in the Small Intestine."—Mr. Teevan, "On a Case of Traumatic Stricture and numerous Fistulæ Cured by Internal Urethrotomy."—Mr. Higgens, "On a Case of Hydatid of the Orbit."—Dr. Cayley, "On a Case of Empyema, in which washing out the Pleural Cavity was followed by Convulsions and Death."

Saturday, Oct. 14.

ROYAL FREE HOSPITAL.—Operations, 2 P.M.
CHARING-CROSS HOSPITAL.—Operations, 2 P.M.

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